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SAFETY

PROGRAM

COMMONWEALTH OF PENNSYLVANIA

RAYMOND P. SHAFER, GOVERNOR

OCTOBER 9, 1968

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COMMONWEALTH OF PENNSYLVANIA

HIGHWAY SAFETY PROGRAM

- - -

October 9, 1968

Prepared By

Highway Safety Group

and

The Governor's Highway Safety Task Force

For

National Highway Safety Bureau
Federal Highway Administration
U. S. Department of Transportation

In Accordance with Section 402 Title 23

U. S. Code - - - HIGHWAYS

HIGHWAY SAFETY PROGRAM

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PRIMARY RESPONSIBILITY

FOR PROGRAM AREAS

BY

DEPARTMENT

- - - - -

REVENUE	301	Periodic Motor Vehicle Inspection
	302	Motor Vehicle Registration
	303	Motorcycle Safety
	305	Driver Licensing
PUBLIC INSTRUCTION	304	Driver Education
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JUSTICE	306	Codes and Laws
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STATE POLICE	315	Police Traffic Services

In addition, the various Departments contributed to the preparation of programs in accordance with the responsibilities shown on the organization chart in Program Area 300.

INTRODUCTION

The Pennsylvania Highway Safety Program has been prepared and is being submitted to fulfill the preliminary requirements of Public Law 89-564, Section 402, Title 23 and Public Law 90-495, Section 13, (U.S. Code - Highways) known as the 1966 Highway Safety Act and the 1968 Highway Safety Act respectively.

These laws state that:

"Each state shall have a Highway Safety Program approved by the Secretary, designed to reduce traffic accidents and deaths, injuries and property damage resulting therefrom. Such program shall be in accordance with the uniform standards promulgated by the Secretary. . ."

This program includes the status of the Commonwealth's traffic safety activities as they apply to the 16 Federal Highway Standards as of June 30, 1968. It also includes a listing of the safety projects which have been undertaken as well as the safety legislation introduced or passed since June 30th. It includes a description of the projects to be undertaken including the necessary funding where cost estimates are available at this time.

This program, however, is to be considered as "interim" only and should not be construed as the "final" program submitted to the Secretary to meet the full requirements of the Highway Safety Act. It is not possible at this time to complete the final program inasmuch as all 16 standards have not been issued nor has the program manual been distributed which details the minimum requirements necessary to comply with the standards. A "final" program, therefore, will be prepared at a later date to meet the December 31, 1969 deadline providing the above mentioned documents will have been distributed, by the Highway Safety Bureau, in sufficient time to enable a survey and program development for the over 2700 local political subdivisions within the Commonwealth.

This program submission is based upon the format of Appendix C as contained in the procedural guide for highway safety program submissions issued July 22, 1968. Documentation of information contained in this program in the form of Appendix A and B, Legislative Acts, manuals and specifications are on file and are available for review in the office of the Highway Safety Group, Harrisburg, Pennsylvania; one copy is also being filed with the Regional Highway Administrator.

Cross referencing of special items in this program, particularly those detailing the deficiencies, applies to the numerical items listed in Appendix A.

In some instances the program includes projects or activities which exceed the minimum standards but which are believed to be vital to the Pennsylvania Traffic Safety Program. These projects have been included under "Action Required" and identified as "Expanded Program."

ORGANIZATION

Governor

The Governor of Pennsylvania is responsible for the administration of the Highway Safety Program in Pennsylvania. No legislation for empowerment is necessary.

Governor's Highway Safety Task Force

On October 18, 1967 the Governor appointed an eight member cabinet-level task force comprised of:

Robert G. Bartlett, Chairman	Secretary of Highways
Warner M. Depuy	Secretary of Revenue
Dr. Thomas W. Georges, Jr.	Secretary of Health
Dr. David H. Kurtzman	Superintendent of Public Instruction
David O. Maxwell	Commissioner of Insurance
Colonel Frank McKetta	Commissioner of State Police
Arthur F. Sampson	Secretary of Administration and Budget Secretary
William C. Sennett	Attorney General

The responsibilities of the Task Force are to advise the Governor on safety matters, formulate objectives, assign responsibilities and approve program and budgeting requirements.

Governor's Highway Safety Coordinator

The Governor also designated the Secretary of Highways as the Highway Safety Coordinator for Pennsylvania. The responsibilities of this appointment are to: advise the Governor's Task Force, organize and coordinate the efforts of the State Departments and municipalities, identify needs, prepare, maintain, and revise program structure, conduct liaison with Federal agencies, review applications, provide research and assistance for needed highway safety legislation, prepare safety program budgets, prepare and/or review applications for safety grants, establish accounting procedures for state and local agencies, maintain records, and perform audits.

Highway Safety Group

The safety group was organized by and is directly under the supervision of the Governor's Safety Coordinator to perform the detail necessary to accomplish the responsibilities of the Coordinator. It is the central position of responsibility for integrating the diverse and scattered safety activities of the Commonwealth into a cohesive and unified program. Coordinating, evaluating and providing leadership for the highway safety program to state and local governments is the primary function of this group.

State Departmental Participation

Each Department of the Commonwealth is assigned the responsibility of coordinating the highway safety efforts of their Department, preparing applications for projects within their jurisdiction, maintaining progress and accounting records, preparing and submitting reports as required and evaluating effectiveness of programs and projects. In addition, each Department performs all Planning and Administrative functions for program areas under its jurisdiction.

Municipalities Participation

Controls are being implemented to assure that 40% of Pennsylvania's safety apportionment is reserved for local projects or for state projects that will directly benefit municipalities. Presently under consideration is the formation of a committee comprising representatives of the various municipal organizations i.e., League of Township Supervisors, State Association of Boroughs, etc. This committee will act in an advisory capacity to the Governor's Coordinator on matters relative to local communities. Municipalities will be advised of the safety program through mailings and through personal contact by the Highway Safety Group.

Except where unusual circumstances may require deviation, the municipalities program will conform to a unified statewide plan.

Technical assistance will be provided the municipalities by the various Departments of the Commonwealth.

Public Law 1019, Section 101 defines a political subdivision in Pennsylvania as "any county, city, borough, incorporated town, township, school district or poor district".

Fiscal Control

Fiscal procedure and control for the Highway Safety Program is established and maintained by the Comptroller for the Department of Highways who is a member of the Governor's Office of Administration, Bureau of Accounts. Monthly fiscal reports are being prepared for each project by the state and local agencies, by Standard, Project and Object Classification. Standard forms designed for the Safety Program to record expense data by both state and local agencies have been prepared. Special accounts have been established into which federal reimbursement will be recorded for distribution to local governments and state accounts. Financial matters for the Safety Program will be subject to the same processing as other state programs.

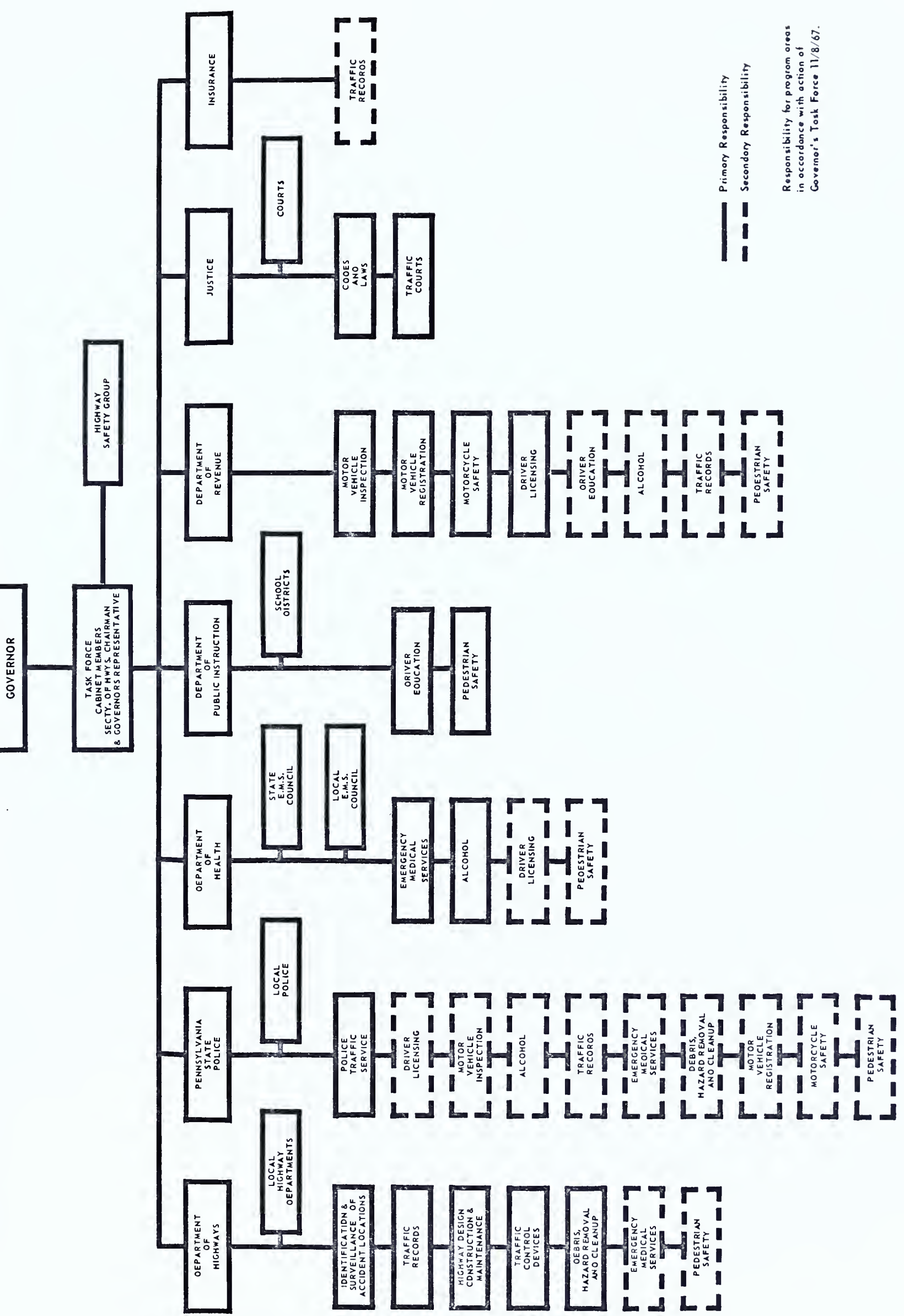
A special audit staff under the Comptroller for the Department of Highways will perform a continuing audit.

Communication and Coordination

Communications vary depending on the standard function. For each standard, an order of communication has been established. In some instances it is directly with the municipality through the Coordinator's office and the responsible state agency. In other areas, Emergency Medical Services for example, communications with the municipality will be through an area Emergency Medical Services Council.

Planning and Administrative Costs

For the fiscal period 1968/69, the cost of planning and administering the safety program by the various state departments will be \$485,000.00. This cost will increase to approximately \$500,000.00 for each year thereafter.



PERIODIC MOTOR VEHICLE INSPECTION - 301

PRESENT STATUS

The Commonwealth of Pennsylvania has required a semi-annual inspection of all motor vehicles since 1929, and exceeds the National Highway Safety Bureau Inspection Standard, except for two areas.

CURRENT PROGRAM DEFICIENCIES

- a. An inadequate examination and certification of personnel who perform the motor vehicle inspection. (Reference: Appendix A, Item 5)
- b. Publication of summaries of records of all inspection stations. (Reference: Appendix A, Item 9)

ACTION NEEDED

- a. Training of inspection mechanics, examination and certification.
Action to be taken is the planning, development, and operation of a program to assure that competent personnel perform the motor vehicle inspections. Such a program will require budgetary approval before implementation. It is anticipated that this program can be implemented during the Fiscal Year 1969-70 at a cost of approximately \$400,000 for the initial training and certification of approximately 80,000 mechanics. It is further estimated that an annual expenditure of approximately \$60,000 will be required to accommodate the turnover of some 10,000 mechanics.
- b. Summaries of Records of all Inspection Stations. In order to comply with the requirement that summaries be published, it becomes necessary to amend our present manual procedure to one suitable for Electronic Data Processing. Such a program requires budgetary and space approval for implementation. It is anticipated that this program can be implemented subsequent to the development of the Registration Conversion Program (See Standard 302). The development of an Inspection Records Program in conjunction with the Registration Conversion Program is considered to be the most logical, economical, and informative approach toward a central data system. The initial cost will exceed \$350,000 plus computer costs for the planning and development of a six-month operation. Subsequent years' cost is estimated at \$550,000 annually, plus computer costs to record the approximately 13,000,000 inspections. An early implementation of this program is most desirable in order that data may be accumulated to be readily available for integration into the Data Processing system upon completion of the Registration Conversion Program.

EXPANDED PROGRAM

- a. A four-cycle inspection program as required by Legislative Act 346, Session of 1967, is to be implemented in the calendar year 1969 to alleviate

the crowded conditions at the inspection stations and to develop the administrative workload equally into a year-round operation. Adoption of the four-cycle program does not reduce the requirement for a semi-annual inspection of all vehicles, nor does it in any way affect the degree or type of inspection. It is estimated that an initial expenditure for the first year's operation will be \$75,000, and an annual cost thereafter of approximately \$60,000.

b. An increase of Pennsylvania State Police Inspection Station Supervisors has been needed for some time, and the successful operation of the four-cycle program mandates that the supervisory force be expanded to properly service the quarterly inspection periods. It becomes necessary to add at least eighty-six (86) Inspection Station Supervisors and 13 non-commissioned officers to the present complement for proper supervision and enforcement. It is estimated that the cost of this addition will be \$1,650,000 annually.

c. A study should be completed to determine standards to be established for the inspection and licensing restrictions applicable to re-constructed vehicles and those built by other than a constituted manufacturer. It is felt that such a study could be conducted for an estimated \$25,000.

d. In addition to the semi-annual inspection required for all vehicles, school buses must be inspected in the month of August (or before school buses are put in service.) This inspection is performed by the State Police. Spot inspections by State Police during the school year have been found to be particularly effective. Plans are being made to increase the number of spot inspections to a representative sampling of all registered school buses. It is estimated that the cost of additional inspections would be from \$25,000 to \$50,000 a year.

POLITICAL SUBDIVISION PROGRAM

None required. The administration of this functional program is the responsibility of State level agencies, and does not relate to direct participation of political subdivisions.

REFERENCES

Reference and documentation are on file in the office of the Highway Safety Group, Harrisburg, Pennsylvania.

1. Appendix A
2. Appendix B
3. Official Inspection Station Rules and Regulations, 1967
4. Legislative Act 346, Session of 1967 (House Bill 1479; P.N. 2625)

PRESENT STATUS

The Commonwealth of Pennsylvania's Motor Vehicle Registration Standard complies with all aspects of the standard, but in such a manner which is not considered within the intent of the standard, nor is the manual procedure considered adequate to provide access to the required information. Plans are currently being formulated to convert the present registration system to Electronic Data Processing. It is anticipated that this conversion program will be completed by 1970.

CURRENT PROGRAM DEFICIENCIES

- a. The manual cross-reference capabilities of vehicle inspection register and accident records register with the registration information system. (Reference: Appendix A, Items 16(b), (c), & 17)
- b. Lack of interrogation capability through remote terminal type-writer or remote terminal video screen. (Reference: Appendix A, Items 18 (b), (c))
- c. Lack of a registration system for processing of information by Electronic Data Processing. (Reference: Appendix A, Items 19(b), (c), (d))

ACTION NEEDED

(a. b. c.) Central Data Processing System.

The information is available to cross-reference the vehicle inspection register with the registration register, however, since it would be a manual operation, such cross-referencing is not conducted or deemed feasible. Full implementation of the Inspection Summaries of Records Program and Vehicle Registration Conversion Program is required to provide an immediate access capability.

Accident records have a limited capability to cross-reference with Motor Vehicle Register, since this would require a manual operation. Full implementation of the Motor Vehicle Registration Conversion Program is required to develop this cross-reference capability.

A capability to enter and update new information currently existing for the vehicle titles (Item 16(a) and stolen vehicle (Item 16(c) registers. Full implementation of the Motor Vehicle Registration Conversion and of the Inspection Summaries of Records Program is required to provide a checking capability.

Finalization of plans and full implementation of the Motor Vehicle Register conversion will designate the system to be adopted. This may include the establishment of branch offices throughout the state to properly serve the public.

Act 238, passed by the General Assembly in July 1968, permits the Secretary of Revenue to stagger the renewal dates for registration of vehicles, thus facilitating electronic data processing.

EXPANDED PROGRAM

To determine how to most effectively utilize Commonwealth resources and personnel and still facilitate the procedures for registration and licensing, it is essential that a study be conducted as to the feasibility of decentralization versus centralization. Such a study could be performed at an estimated cost of \$30,000.

POLITICAL SUBDIVISION PROGRAM

None required. The administration of this functional program is the responsibility of State level agencies and does not relate to direct participation of political subdivisions.

REFERENCES

The following references and documentation are on file in the office of the Highway Safety Group, Harrisburg, Pennsylvania.

1. Appendix A
2. Appendix B
3. Act 238 (Senate Bill 1417; P.N. 2251)

PRESENT STATUS

The Commonwealth of Pennsylvania now requires the following which meets or exceeds the minimum requirements in this standard:

1. Motorcycles are to be inspected when initially registered and semi-annually thereafter on the same basis as automobiles.
2. An endorsement on the operator's license restricting the licensee to the operation of a motorcycle only the examination was taken on a motorcycle.
3. That a seat, foot rests, and hand grips be provided before passengers may be carried.

Current practice does not meet minimum standards in other areas.

CURRENT PROGRAM DEFICIENCIES

- a. An initial examination is not required for motorcycle operation. (Reference; Appendix A, Item IA.)
- b. A periodic examination is not required for motorcycle operation. (Reference; Appendix A, Item IB.)
- c. A special license or auto driver's license endorsed is not required for motorcycle use unless the operator is examined on a motorcycle. (Reference; Appendix A, Item IC.)
- d. Operators of a motorcycle are not required to wear a helmet. (Reference; Appendix A, Item IIA.)
- e. Operators of a motorcycle are not required to wear eye protection devices. (Reference; Appendix A, Item IIB.)
- f. Motorcycle passengers are not required to wear a helmet. (Reference; Appendix A, Item IIC.)
- g. Performance standards for motorcycle safety helmets have not been adopted. (Reference; Appendix A, Item IID.)
- h. Performance standards for eye protection devices have not been adopted. (Reference; Appendix A, Item IIE.)
- i. Motorcycles need not be equipped with a rearview mirror. (Reference; Appendix A, Item IIIB.)
- j. Performance standards for motorcycle rearview mirror have not been adopted. (Reference; Appendix A, Item IIIC.)

ACTION NEEDED

Implementation of recently enacted legislation, House Bill 1776, (Act 162) effective September 13, 1968, will correct the deficiencies listed as a, c, d, e, f, g, h above. Therefore, not further action is required.

Action needed for deficiencies not listed above:

b. The periodic re-examination of the motorcycle operator will require legislation and budgetary consideration. It is anticipated that the adoption of a re-examination program would include all motor vehicle operators. Therefore, separate legislation designed for the motorcycle operator's periodic re-examination is not envisioned at this time. Estimated additional cost included with Standard 305.

i. Enactment of pending legislation, (Senate Bill 1414 (P.N. 2279)) to require use of rearview mirrors.

j. Preparation of performance standards subject to enactment of legislation referred to in (i) above.

POLITICAL SUBDIVISION PROGRAM

None required. The administration of this functional program is the responsibility of State level agencies and does not relate to direct participation of political subdivisions.

REFERENCES

References and documentation are on file at the office of the Highway Safety Group:

- (1) Appendix A
- (2) Appendix B
- (3) Legislative Act 162 (House Bill 1776; P.N. 3589)
- (4) Senate Bill 1414; P.N. 2279
- (5) Regulations governing the approval of protective headgear and eyeshields for motorcycle operators and riders.
- (6) Official Inspection Station Rules and Regulations*

* (See Standard 301, Reference 3)

PRESENT STATUS

The Commonwealth of Pennsylvania's driver education program content, teacher certification requirements, minimal time standards, organizational and administrative procedures of the Pennsylvania program as presently constituted, meet or exceed Federal Standard 304, (See Reference 4 and 5.)

The present staff of the Division of Highway and Aviation Education within the Department of Public Instruction consists of a coordinator and four advisers, all of whom meet or exceed minimal education and experience requirements and who spend 100% of their time on highway and aviation education.

All presently employed driver education teachers meet or exceed minimal certification requirements (12 semester hours).

During the 1967-68 school term, 599 public high schools of a total of 637 within the Commonwealth offered the Standardized Program, both classroom and practice driving. (Minimal time requirements are 30 clock hours classroom and 6 clock hours practice driving.) Of the 38 high schools not offering driver education, 18 are located in the City of Pittsburgh. During the past school term, approximately 90,000 pupils completed both classroom and practice driving in the 599 high schools. However, the number of potential eligible pupils enrolled in public and nonpublic high schools was in excess of 200,000, indicating the scope of the problem. Public schools offering driver education must, by law, make the program available to all pupils, both public and nonpublic. The program must be offered during the regular school day and may be extended to after school, Saturday and summer. Simulators, multi-car ranges and multimedia classroom systems may be utilized.

The Commonwealth provides financial support to public schools only, in the amount of \$35 (appropriated annually from the Motor License Fund) per pupil completing the approved 30 and 6 course. Reimbursement is provided for all pupils, public and nonpublic, accommodated in the public high school program. Under the provisions of a 1966 Ruling by the Attorney General, public schools which offer a standardized driver education program must make such programs available to all high school pupils, public and nonpublic within the school district.

Driver improvement schools for violators are provided by the Division of Continuing Education of the Department of Public Instruction in cooperation with the Division of Highway and Aviation Education and the Bureau of Traffic Safety of the Department of Revenue.

Adult driver education programs for new drivers are conducted by the Division of Continuing Education. At the present time, lack of reimbursement has resulted in the number of schools cooperating in this program being reduced to about ten.

An additional responsibility legislated to the Division of Highway And Aviation Education is the licensing, inspection, supervision and administration of the Commercial Driving Schools within the Commonwealth, of which

there are 182. One hundred sixty-two are licensed to provide only practice driving, while 20 are offering approved courses meeting the minimal standards required of the public high school program. All commercial schools must conform to present standards for approval under the provisions of Act 609. (See Reference 6.)

CURRENT PROGRAM DEFICIENCIES

- a. High schools are not required to offer driver education. (only 50% of eligible pupils are currently completing a Standardized Program. (Reference: Appendix A, Item 1)
- b. There are no continuous programs of development and research to improve instruction in driver education and training. (Reference: Appendix A, Item III)
- c. There are no comprehensive driver education programs that encompass all segments of the driving population, high school youth, out-of-school youth and adults.
- d. Annual evaluation of the state program of driver education is lacking. (Reference: Appendix A, Item IV)

ACTION NEEDED

- a. Course offerings in driver education will be encouraged for public and nonpublic schools, through legislative and administrative action. A bill has been introduced in the legislature which will require all new drivers to have completed an approved driver education course prior to licensing. (Reference: Senate Bill 1414)
- b. Continuing programs of development and research are needed and will be undertaken to improve instruction in driver education and training.
- c. Comprehensive driver education programs to encompass all segments of the driving population, high school youth, out-of-school youth and adults will be designed.
- d. Annual evaluation of the state of driver education will be initiated by the Department of Public Instruction.

EXPANDED PROGRAMS

1. Teacher training institutions will be encouraged to offer advanced degrees in Safety Education.
2. Programs for research and development of projects associated with the special needs of handicapped and special education students are needed and anticipated by the Division and the Bureau of Special Education.

3. Consideration will also be given to the curriculum and program needs for providing instruction in the training of classified operator (e.g., bus, truck, motorcycle, etc.)
4. Legislation is anticipated that will provide for reimbursement to schools offering adult driver education.
5. The proposed Intermediate Unit Plan for Pennsylvania, providing 25 School Administrative Units in place of the present 524 Districts will provide more adequate supervision of driver education programs. Each Intermediate Unit shall employ a Director or Supervisor of Driver and Traffic Safety Education on the Administrative Staff. Such Director or Supervisor shall be responsible for the implementation of the comprehensive driver education program for that unit.
6. Teacher training institutions presently offering safety education courses leading toward certification will provide additional courses approved by the Department of Public Instruction, in order to make available a minimum of 24 semester hours credit in Education for Safe Living. Every teacher training program will include an opportunity for student teaching in both classroom and practice driving, as well as experience in simulation, multiple car methods and multimedia classroom methodology.
7. Commercial schools presently licensed under the provisions of Act 605 (1951) and offering only practice driving instruction by licensed instructors, will be required to conform to the provisions for approval under regulations adopted to implement Act 609 (1961). Facilities shall meet or exceed present standards under Act 609. Additionally, all practice driving instructors employed by such schools shall meet the qualifications established for teacher aides under the provisions of Act 574 (1965). After June 30, 1971, no license or renewal will be issued to a commercial school not complying with these standards. (See Reference 6, 7 and 8 for Acts Number 609, 605 and 574.)

POLITICAL SUBDIVISION PROGRAM

Local school districts must make driver education available for all pupils - public and nonpublic.

Local school districts must provide adult classes in driver education.

Teacher training institutions must provide improved programs, both qualitatively and quantitatively.

The Department of Public Instruction will provide information and assistance at the local levels with respect to the needs of the Driver Education Standard.

ON-GOING PROJECTS

The following projects are on-going driver education related projects that have been approved by the National Highway Safety Bureau.

1. Expanded Driver Training (D.E. 68-2-001) Approved 4-28-68.
2. Adult Driver Training (D.E. 68-1-001) Approved 5-24-68.
3. In-Service Driver Training (D.E. 58-3-001) Approved 5-29-68)

The additional projects are driver education projects that have been submitted to the National Highway Safety Bureau but are pending Federal approval.

1. Expansion of Driver Education in Snyder County. Submitted 9-12-68
2. Expansion of Driver Education by the use of Multimedia Teaching Device. Submitted 9-12-68.
3. Measurement of Skill Teaching Effectiveness of Teacher Aides in Pennsylvania. Submitted 9-12-68.

REFERENCES

References and documentation are on file in the office of the Highway Safety Group, Harrisburg, Pennsylvania.

1. Appendix A
2. Appendix B
3. Senate Bill 1414; Printer's No. 2279
4. Summary of Statewide Driver Education Program
5. Bulletin 395, "A Guide to Driver Education and Highway Safety."
6. Act 609
7. Act 605
8. Act 574

STANDARD 304
DRIVER EDUCATION

Estimated Costs

For the 69/70 Fiscal period	State Costs	1,000,000
	Local Costs	2,000,000

Local costs are based on additional requirements for 87 larger school districts that will require one simulator and two instructors. School districts with less than 400 eligibles will not presently be considered for simulators.

The state costs shown are for the total expanded program contingent on legislation making Driver Education mandatory.

PRESENT STATUS

The Commonwealth's program does not meet all the minimum requirements defined by the National Highway Safety Act. Major areas of non-compliance are in classification of license, proof of place and date of birth, a four-year re-examination program, and information concerning drivers who are receiving blind benefits.

CURRENT PROGRAM DEFICIENCIES

a. Current law does not provide for the surrender of all licenses from other jurisdictions prior to the issuance of a Pennsylvania operator's license. The Motor Vehicle Code requires that non-residents operating in the Commonwealth for compensation for a period exceeding thirty days in the calendar year shall be required to obtain a Pennsylvania operator's license. (Reference; Appendix A, Item IA.1.)

b. Only one license is issued to each driver except that school bus operators are issued a special certificate in addition to the regular license following satisfactory completion of a special examination. This exception is expected to be eliminated upon enactment of pending legislation placing the classification of licenses in effect. (Reference; Appendix, Item Ia.2a.)

c. Current operator's license does not indicate the type(s) of vehicle(s) that the licensee is authorized to drive, except that the regular license is endorsed with a Restriction Code "M", if the person takes his examination on a motorcycle. The "M" endorsement restricts the individual to the operation of a motorcycle only. (Reference; Appendix A, Item IA.2b.)

d. Proof of date of birth is submitted only in the form of an affidavit on the application for an original license. Place of birth and proof thereof are not required at any time. (Reference; Appendix A, Item I.B.)

e. There is at the present time no requirement to demonstrate an ability to operate a class(es) of vehicle(s) except that of the motorcycle, as outlined in (c) above, and a special examination for school bus operators, as outlined in (b) above. (Reference; Appendix A, Item I.C.1.)

f. The present program provides for a physical examination to include visual acuity every ten years. (Reference; Appendix A, Item I.D. 1 and 2.)

g. There is no program requiring all drivers to be examined for knowledge of rules of the road, except upon the original examination or the accumulation of six points for the second time which requires a re-examination when competency is questionable. (Reference; Appendix A, Item I.C.3.)

h. Present system dictates that individuals receive an application for renewal by mail and return same to the Bureau of Motor Vehicles without having to appear in person. (Reference; Appendix A, Item I.G.2.)

i. There is no system to identify all licensed drivers receiving any type of benefits for the blind or nearly blind. (Reference; Appendix A, Item I.J.2.)

j. The present program of having a medical representative from the Department of Health is inadequate, therefore, measures should be taken to expand the Medical Advisory Board.

ACTION NEEDED

a. Surrendering of operator's license from other jurisdiction requires legislation to amend current Motor Vehicle Code. Compliance with this phase of the standard will be assured upon adoption of the one-license concept.

b. c. Enactment of pending legislation will be provided for the classification of license by endorsement thereon indicating the type(s) of vehicle(s) an individual is authorized to drive, thereby issuing only one license.

d. Proof of date and place of birth will be required prior to initial licensure in the form of a birth certificate or other legally adopted means.

e. Enactment of pending legislation will provide for a demonstration of an applicant's ability to operate the class(es) of vehicle(s) for which he desires to be licensed. Driver examination programs will be expanded accordingly.

f. g. Implementation of a four-year re-examination program by expanding the present ten-year physical program to include knowledge of the rules of the road.

h. Adoption of a de-centralization program whereby applicants may appear in person for original and renewal licenses. Present system of one central licensing agency prohibits compliance with this portion of the standard.

i. Administrative coordination with the Department of Public Welfare to identify those persons licensed and receiving blind benefits.

j. Expansion of the present medical advisory program. Plans have been formulated and are in the process of being executed to form a Medical Advisory Board consisting of one neurologist, one doctor of cardiovascular disease, one doctor of internal medicine, one general practitioner, one ophthalmologist, one general surgeon, one psychiatrist, one physiatrist, one orthopedic surgeon, and one optometrist.

EXPANDED PROGRAMS

1. Decentralization of licensing (and vehicle registration) functions are to be studied in connection with the service requirements of these standards. Branch offices are being considered where direct telecommunications systems will tie with a central computer. Such a study is considered at an approximate cost of \$30,000.00.

2. A Driver Test Facility is being planned as a pilot project to be used for development of driver test methods in anticipation of separate licensing by classes of vehicles. Design phase has received approval of National Highway Safety Bureau, June 27, 1968. Cost of this program in 1968-69 is \$375,000.00, and in 1969-70, \$525,000.00.

3. Microfilm of operators source document records is essential to maintain required instruments in accordance with the Motor Vehicle Code. An initial expenditure of \$23,500.00 for 1969-70 has been requested.

4. Examination of special operators involving medical, physical and incompetent cases by medical personnel is essential to determine the flexibility and adoption of new physical standards. Money has been requested to review 500 cases during 1969-70 at a cost of \$25,000.00.

5. An increase of Traffic Safety field representatives is essential to relay the safety program to all citizens of the Commonwealth. The addition of six representatives has been requested in the 1969-70 budget at a cost of \$40,652.00.

POLITICAL SUBDIVISION PROGRAM

None required. The administration of this functional program is the responsibility of State level agencies and does not relate to direct participation of political subdivisions.

ON-GOING SAFETY PROJECTS

1. Driver Test Facility (DL 68-1-001) June 27, 1968.

REFERENCES

The following references and documentation are on file at the office of the Highway Safety Group, Harrisburg, Pennsylvania:

- (1) Appendix A
- (2) Appendix B
- (3) House Bill 1483 (PN 1740)

PRESENT STATUS

The Commonwealth of Pennsylvania meets the minimum provisions of this standard. Local jurisdictions have been required by law for many years to follow the Pennsylvania Vehicle Code and may not adopt ordinances which conflict with it. There has not been, however, a comparison of local ordinances nor a model traffic ordinance developed by the Commonwealth for local use.

The Vehicle Code conforms largely to the Uniform Code and is being amended gradually each year to follow its provisions more closely, although there has not been an overall updating since 1959.

CURRENT PROGRAM DEFICIENCIES

None.

ACTION NEEDED - EXPANDED PROGRAM

Although it is believed that the minimum requirements of this standard have been met, the following action is felt necessary to improve the effectiveness of Pennsylvania's activity in this area:

1. Complete a new study comparing Pennsylvania Vehicle Code with the current Uniform Vehicle Code and Laws of other states.
2. Continue to amend the Vehicle Code annually to conform with the Uniform Code and Federal Standards.
3. Study local ordinances and prepare a Model Traffic Ordinance for distribution to and use by local jurisdictions.

Legislation has been prepared clarifying Section 1002 of the Vehicle Code with regard to the establishment, posting and enforcement of speed limits (Reference 4). Additional legislation has been prepared which will further specify that prosecutions for traffic violations must be brought under the Vehicle Code, rather than local ordinances (Reference 5).

POLITICAL SUBDIVISION PROGRAM

The Commonwealth should assist the local jurisdictions in reviewing their local ordinances and adoption of the Model Traffic Ordinance when it becomes available.

REFERENCES

The following documentation is on file in the Office of Highway Safety Group, Harrisburg, Pennsylvania:

- (1) Appendix A
- (2) Appendix B
- (3) Pennsylvania Vehicle Code, with amendments to July 31, 1968
- (4) Proposed Legislation Governing Speeds
- (5) Proposed Legislation Regarding Prosecutions Under Vehicle Code

PRESENT STATUS

There are approximately 5,200 local magistrates known as Justices of the Peace, and Aldermen who independently conduct a court not of record yet do handle traffic court cases.

These magistrates, depend on a fee basis for each traffic case. If the defendant is found guilty, the magistrate receives a \$5.00 or \$10.00 fee in costs paid by the defendant. If the defendant is found not guilty the magistrate collects the \$5.00 or \$10.00 fee from the county in which the violation occurred. Either way is considered a fee basis depending and accruing from the adjudication of traffic law cases.

There are 67 county courts of common pleas in Pennsylvania having a total of 267 elected Judges, each of whom decide traffic court cases on appeal from magistrates. These appeals are on a de novo basis and are of original jurisdiction and cannot be considered appellate courts.

There is only one appellate court in Pennsylvania, the Superior Court, which hears all appeals from the 267 Judges.

The 67 courts of common pleas and the Superior Court are financially independent of any revenue accruing from the adjudication of traffic law cases.

The Legislature must give serious consideration to the magistrates to either disassociate them from traffic cases, or put them on a salary basis for traffic cases to be paid from a source independent of any revenue accruing from the adjudication of traffic law cases.

Amendments to the Pennsylvania Constitution have been passed and the Legislature is in the process of enacting enabling legislation and changes in Court system to have a court administrative structure. The type of such administrative structure will be decided by the Legislature.

The Legislature in implementing the traffic court laws under the recent Constitutional amendment should set up a uniform procedure for all courts in court procedure in traffic cases. The Legislature's enactment of court procedures with a court administrator will result in a uniform rule governing court procedure with possible administrative manuals and guides.

CURRENT PROGRAM DEFICIENCIES

- a. There is no court administrative structure at the state level nor is there a court administrator assigned to traffic courts.
(Reference: Appendix A, Items IA, B)

- b. There are no uniform rules or manuals governing court procedure in traffic cases throughout the Commonwealth. (Reference: Appendix A, Item II A)
- c. There is no uniform accounting system for traffic citations, collection of fines, fees and costs followed by all courts in the Commonwealth. (Reference: Appendix A, Item II B)
- d. There is no statewide policy concerning the types of violations for which personal appearance is required in court. (Reference: Appendix A, Item II D)

ACTION NEEDED

- a, b, c, d. While the above mentioned items pertaining to Traffic Courts and Administration are listed as "deficiencies" in this program, it should be recognized that they are in reality "recommendations" but are not required for compliance with this standard. However, because it is believed that they are an essential part of any effective traffic safety program, they will be recommended to the legislature for enactment under the amendments to the Pennsylvania Constitution which recently passed the legislature. Any specific changes in traffic court administration will depend upon course of action by the legislature.

EXPANDED PROGRAM

The State Police utilize a "No-fix" ticket system. Legislation has been introduced, Senate Bill 1415; P.N. 1757 (Reference 3), which will authorize the Secretary of Revenue to establish a list of hazardous moving violations and require that a uniform "NO-fix" ticket be used by all jurisdictions for arrests made against these violations.

POLITICAL SUBDIVISION PROGRAM

The magistrates' courts located either in cities, boroughs, or townships will be directly affected by action taken in the paragraph above, as will the courts of common pleas and the superior courts. All local enforcement agencies will be similarly affected. A specific program cannot be designed and implemented until the extent of legislative action is known.

REFERENCES

Reference and documentation are on file in the office of the Highway Safety Group, Harrisburg, Pennsylvania.

- 1. Appendix A
- 2. Appendix B
- 3. Senate Bill 1415; Printer's No. 1757
- 4. The Pennsylvania Vehicle Code, with amendments to August 1, 1968. *
- * See Standard 306, Reference 3.

PRESENT STATUS

The Commonwealth of Pennsylvania meets only that portion of the standard which requires authority be available to determine blood-alcohol content by chemical tests but only if the driver grants permission for such tests. Present statutes also specify blood/alcohol concentration levels to establish presumptive evidence of innocence or guilt but these percentage levels do not comply with this standard.

The State Police use Intoximeter equipment in providing breath tests for those persons suspected of driving under the influence of alcohol. Beginning 1968/69 fiscal year, the State Police will conduct a program for use of Breathalyzer equipment for the same purpose. (Reference: Program Submission 315) Under Federal Application No. AL 68-1-001.

Legislation is presently pending, which passage will bring the Commonwealth into full compliance with this standard.

CURRENT PROGRAM DEFICIENCIES

- a. A blood-alcohol concentration by weight equal to or exceeding .10% is not required to establish presumptive evidence of being under the influence of alcohol. (Reference: Appendix A, Item IB)
- b. A person who has received his driver's license has not been deemed to have given his consent for a chemical test. He must give permission before a test can be made. (Reference: Appendix A, Item IIA, B, C, D, and E)
- c. Chemical tests to establish blood-alcohol content are not required for drivers or adult pedestrians who die within 4 hours of crash. (Reference: Appendix A, Item IIIA)
- d. Chemical tests to establish blood-alcohol content are not required for surviving drivers who are involved in fatal crashes. (Reference: Appendix A, Item IIIB)
- e. Procedures have not been established by Commonwealth for determining: qualifications of personnel who administer chemical tests; methods for obtaining samples and completing analysis; report format of results. (Reference: Appendix A, Item IV A, B, C)

ACTION NEEDED

- a-c. Implementation of the recently enacted legislation (Senate Bill 1413; P.N. 1755, Act 237 dated 7/29/68) will correct the deficiencies in items a through c cited above.

- d. Legislation will be prepared and introduced to authorize police officers to make chemical tests to determine blood-alcohol content in surviving drivers in crashes fatal to others. State and local police will be encouraged to conduct such tests as are deemed practicable.
- e. A procedural manual will be published for chemical testing, including qualifications of personnel, methods of test and form of reports.

EXPANDED PROGRAM

1. An expanded educational program will be established to inform the public on alcoholism and its relationship to drinking drivers and accidents.

POLITICAL SUBDIVISION PROGRAM

Local political subdivisions, particularly local police will be required to participate in chemical testing in order to comply with Act 237. This will require extensive training of local police and technicians, purchase of proper equipment, establishment and certification of testing laboratories and procedures to maintain records and file required reports. An estimated 50% of usage of State Police Breathalyzer equipment will be by local police department.

ON-GOING SAFETY PROJECTS

1. Alcohol Testing - No. A.L. 68-1-001. Approved 5-22-68.

REFERENCES

The following documentation are on file in the office of the Highway Safety Group, Harrisburg, Pennsylvania.

1. Appendix A
2. Appendix B
3. Act 237 (Senate Bill 1413; P.N. 1755)

PRESENT STATUS

The Commonwealth of Pennsylvania has a system of route numbering and/or naming of all highways. The Department of Highways' present system of station marking for all state highways is being expanded and accident locations on traffic routes and on other routes with an accident frequency of two accidents per mile per year are recorded as follows:

1. The Interstate System is posted with mile markers and with delineator plaques at 200 foot intervals.

2. Other streets and highways are marked with station markers at 500 foot or 1000 foot intervals where intersections are more than 1000 feet apart.

3. Street names and house numbers are used where intersections are less than 1000 feet apart.

Accident Analysis studies indicate that 94% of the reported accidents on the state highway system will be adequately located for remedial purposes within the location framework set forth above. The studies also reveal that all but 2½% of the accidents occurring off the state system can be adequately located by route name or cross route as related to a remedial treatment program.

Approximately 12,000 accidents occur on approximately 55,000 miles of highway with an ADT of 1,000 vehicles or less. The implied cost associated with marking such routes, both local and state, with station markers at 500 foot intervals would not be feasible at this time.

From the accident report file, for a two year period, individual accident locations are tabulated for state highways, local streets and the turnpike. The Department of Highways Accident Analysis Section has developed and is furnishing local government and turnpike officials procedures for accident reviews which are being followed by the Department. Reports generated include the following:

1. A cluster report on high frequency accident locations.

2. A report wherein a vehicle mileage segment of highway is compared with the entire Legislative Route in any county to determine whether this segment is experiencing a statistically significant higher accident rate.

3. A further report of homogeneous sections of highway including both design and traffic characteristics is produced showing accident severity, accident rate, intensity per mile along with percentages of night accidents and accidents on wet roadways.

4. Updating of the Master Accident file provides annual comparison of sections and reflects locations where accidents are increasing.

An Accident Field Review Team of two Engineers and an assistant are assigned to each of the eleven State Highway Districts. They are responsible for conducting studies at each location where clusters of accidents occur and/or where any segment of highway experiences a significant increase in the frequency of accident occurrence. Present and future hazard elimination programs are formulated from these studies.

Records are kept of capital cost of remedial treatments and cost of accident loss, subject to remedy by the treatment to determine cost-benefit ratios based on accident justification. These ratios will be used in scheduling priorities for projects. After any treatment is implemented, evaluations will be made periodically to determine the effectiveness of this treatment and possible alternate treatments for future accident experience.

The aforementioned teams will continually survey the roadway system as the Accident Records are updated. Methods of correction are initially suggested by the study of patterns of past accidents at any one location. These methods will be evaluated after improvements are made by the effectiveness of that improvement as evidenced in the accident experience after the improvement is effected.

CURRENT PROGRAM DEFICIENCIES

a. Mileposting and/or marking systems have not been completed on all state highways nor on local streets and highways. (Reference; Appendix A, Item 3.)

b. Procedures have not been established by most local governments to correct hazardous locations as they are identified. (Reference; Appendix A, Item 7.)

c. Most local governments are not providing continuous surveillance and accident investigations of the road and street systems although the extent is not known at this time. (Reference; Appendix A, Items 8,9.)

ACTION NEEDED

a. Station Marking and Mileposting - The Department will complete the expansion of the station marking plaques, as outlined in "Present Status" section to comply with this Standard. State Cost \$310,000.00 first year (1969-70) and \$238,000.00 a year for the next two years. An application for this work (69-70) is currently on file with N.H.S.B.

b. and c. Local Government Programs - Local governments will be made aware of their responsibilities regarding accident investigation, surveillance of streets and roads and adoption of procedures to correct hazardous conditions as they are identified.

It is anticipated that legislation may be required to comply with this Standard with respect to the action required by the municipalities. The legislation as proposed under Program Standard 312 can be developed to achieve full conformance to this Program Standard on municipal roads.

ON-GOING PROJECTS

1. Accident Field Review (IS 68-1-001) July 1, 1968
2. Mileposting (Approval Pending at N.H.S.B.)

EXPANDED PROGRAM

The Department of Revenue presently supplies standard Police Accident Report Forms to about one thousand local police departments. Legislation has been introduced (Senate Bill 1416; P.N. 1758) which require the use of the standard forms by all local police departments (Reference 4.)

POLITICAL SUBDIVISION PROGRAM

This aspect is discussed under Action Needed.

REFERENCES

References and documentation are on file at the Office of Highway Safety Group, Harrisburg, Pennsylvania:

- (1) Appendix A
- (2) Appendix B
- (3) Pennsylvania Department of Highways Safety Standards and Policies
- (4) Senate Bill 1416; P.N. 1758 - Police Accident Reports

TRAFFIC RECORDS - 310

The Traffic Records Program submission represents the interim product of the combined efforts of the members of the Traffic Records Committee, reporting to the Governor's Highway Safety Task Force.

The Traffic Records Committee consists of one member each from the Commonwealth's Departments of Health and Insurance, two members each from the Governor's Office of Administration and the Departments of Highways, Public Instruction and State Police and three members from the Department of Revenue.

Basic to the acquisition of intelligence, regarding the entire spectrum of problems relating to Highway Safety, is the Information System. It is to the coherent development of a Safety Information System that this committee is directing its efforts. The resulting plan will be Pennsylvania's response to the Federal Highway Safety Program Standard for Traffic Records. It will use and enlarge upon the Traffic Records data base, enhancing the basic program in several areas not specifically included in the existing standards.

The ultimate Safety Information System Plan is under development and will be finalized during the forthcoming year in coordination with data processing activities now in effect and those to be implemented during that time.

The following program submissions are complementary to the principal submissions and are directed toward the data processing and data records relative to the areas referred to in the questionnaire. The deficiencies and action needed are listed for each program area.

These submissions, in the order presented, are as follows:

- a. Motor Vehicle Inspection (301)
- b. Motor Vehicle Registration (302)
- c. Motorcycle Safety (303)
- d. Driver Education (304)
- e. Driver Licensing (305)
- f. Codes and Laws, and Traffic Courts (306 and 307)
- g. Alcohol in Relation to Highway Safety (308)
- h. Identification and Surveillance of Accident Locations (309)
- i. Highway Design, Construction and Maintenance (312)
- j. Traffic Control Devices (313)
- k. Pedestrian Safety (314)
- l. Police Traffic Services (315)

TRAFFIC RECORDS - 310

(Motor Vehicle Inspection)

PRESENT STATUS

Motor Vehicle Inspection in Pennsylvania is a function of the Department of Revenue, Bureau of Traffic Safety. The data bases relative to Motor Vehicle Inspection are (1) Inspection Stations and (2) Individual Vehicle Inspections. The data and manner of processing is as follows:

(1) Inspection Stations

Manual Processing of:

Station Number
Owners Name
Owners Address
Violations
Suspensions

(2) Vehicle Inspections

Manual Processing of:

Class of Vehicle
Date of Inspection
Make and Model of Vehicle
Vehicle Identification Number
Defects by category
Identification of Inspector
Mileage at time of Inspection
Registration Number

CURRENT PROGRAM DEFICIENCIES

Because of the manual processing of vehicle inspection records and because of the large amount of data involved, the Bureau of Traffic Safety presently is unable to produce the required "Summaries of Records" for vehicle inspection. (Reference: Appendix A, Item 2.A.)

ACTION NEEDED

(Data Processing) The availability of the required summary tabulations necessitates an automated system for vehicle inspection records processing and reporting. This effort has been given a priority assignment second to the automation of Motor Vehicle Registration for reasons of desiring the resulting system to be capable of reporting not only statistically but, relative to specific vehicles and owners, as well. This is considered essential to Pennsylvania's concept of a "Vehicle Defects" program.

The additional hardware capabilities required for inclusion of Motor Vehicle Inspection data is being planned for in the present hardware upgrading requirements outlined under Traffic Records Status for Motor Vehicle Registrations, and additional hardware requirements will be phased into that configuration as Vehicle Registration-Vehicle Inspection system capabilities are developed.

POLITICAL SUBDIVISION PROGRAM

(None required. See Program 301 Submission.)

(Motor Vehicle Registration)

PRESENT STATUS

The registration of motor vehicles is a processing function of the Bureau of Motor Vehicles, Department of Revenue.

Motor Vehicles are presently registered in Pennsylvania via a combination manual and semi-automated addressograph process. Registration tags (License Plates) are issued once every five years with adhesive stickers, to be displayed on the plate, issued in each intervening year. All renewal issuances, for a given type vehicle, are due on the same date.

The data records on file in the present system include the following:

- Owners Name and Address
- Registration Number
- Type of Registration
- Status (Valid, invalid-suspended, revoked)
- Restoration Date (Where applicable)
- Restrictions (Financial responsibility against vehicle)
- Vehicle Description (Year, make, model, class of commercial vehicle)
- Vehicle Identification Number
- Title Number
- Title Issuance Date
- Lien Information
- Indication of prior registration in another state
- Gross Laden Weight (Commercial Vehicles)

An adjunct to the registration files is the "stolen car" file. This file is referenced by all transactions relative to registrations. The stolen car file (Bureau of Motor Vehicles) consists of the following data:

- Registration Data (all of above)
- Date of theft and reporting agency
- Date of Recovery

The Pennsylvania State Police presently maintain a computerized file (General Electric Datanet 30) of stolen car records, some of which duplicates data in the BMV files. This duplication of data is nominal and would appear to be a necessity unless there was a total integration of Criminal Records with Vehicle and Driver files. Such integration is not being contemplated.

Presently, communications with the Motor Vehicle Registration files is both manual (Central Office State Police) and teletype. On-line communications (teletype) relates to:

- State Police (Statewide)
- Philadelphia and Pittsburgh Police Departments
- Local Police Departments (through State Police Sub-stations)

Regular reporting on Motor Vehicle Registrations via the Bureau of Traffic Safety, Department of Revenue includes the following recipients:

Department of Insurance
State Police
Department of Public Instruction
Pennsylvania Insurance Companies (as requested)

CURRENT PROGRAM DEFICIENCIES

The present processing of Motor Vehicle Registrations does not check inspection violation or accident record data against the registration files. The required data is available to perform this check, however, the burden of manual and semi-automated processing is such as to make such checking unfeasible. This will be remedied with the conversion of vehicle registration files to an automated computer system.

The updating of files, within a 48-hour period, is not consistently accomplished. This circumstance will also be corrected through computerization of the Vehicle Registration data. (Reference: Appendix A, Item 2.B.)

ACTION NEEDED

(Legislation) As of June 30, 1968, the Commonwealth of Pennsylvania statutes did not enable staggering of Vehicle Registrations. This has since been corrected. (See Program 302 Submission.)

(Data Processing) Relative to the computerization of the Motor Vehicle Registration Processes, and at the direction of the Secretary of the Department of Revenue the system is presently undergoing study by a combined task force of Revenue EDP Section and Bureau of Motor Vehicles personnel.

The task force has presently established an implementation schedule for file conversions and daily processing phase-over during a one-year (1 year) period, beginning April 1, 1969. Cycling of registration renewals is anticipated, beginning approximately January 1, 1971 with fee-staggering carrying through April 1, 1971. Cycling of renewals would be on a regular-fee basis thereafter.

In conjunction with this automation, implementation of Cathode Ray Tube (Video) Communication with the Vehicle Registration files is planned for State Police Central Headquarters approximately March 31, 1970.

File Storage presently being planned for 24-hour, 7-day/week access, to consist of intermediate disk-file indexing of master records on Data-Cell Files.

To accommodate this increase in computer processing requirements, the Department of Revenue is planning to upgrade its present dual 360-40 hardware configuration to Dual 360-50's by approximately January 1, 1970. In addition, the random storage hardware required for this application will be five (5) 2314 File Implementation devices of 238 million character capacity each and six (6)

Data Cells of 400 million character capacity each, for a total of three and one-half billion characters. This random storage hardware will be phased into both the present and proposed computer configurations as conversions of data proceed.

In the long range outlook for this area, are planned studies for possibility of conversion of Motor Vehicle Registration files to some common denominator for file sequencing and record referencing, such as Social Security number. Company owned or fleet vehicles might be "dummy" numbered.

The purpose served by such numbering is, obviously, the achievement of compatibility, both at the state and national level.

The use of a system of reference such as Social Security number, would permit the "stopping" of renewals through feed-back from such sources as vital statistics data from the Department of Health, and automatic "stops" on financial responsibility, inspection and accident-related violations.

POLITICAL SUBDIVISION PROGRAM

(None required. See Program 302 Submission.)

(Motorcycle Safety)

PRESENT STATUS

The Traffic Records Data Base for Motorcycle Safety is essentially the same as for any other motor vehicle. The function responsible for processing licensing and registration is the Bureau of Motor Vehicles, Department of Revenue. The function responsible for Inspection and Accident Reporting is the Bureau of Traffic Safety, Department of Revenue.

Pennsylvania presently provides the option for testing and licensing drivers for motorcycles only. The Driver License file data reflects this type of licensing by way of record coding and produces a coded license for such drivers.

CURRENT PROGRAM DEFICIENCIES

As of June 30, 1968, there were a number of deficiencies in Pennsylvania statutes relative to Motorcycle Safety (See Program 303 Submission). At that time legislation was pending and, as of this writing, has been enacted into law to become effective September 13, 1968. In regard to the Motorcycle Safety-related data base, this law affects the current files for Driver Licensing, in that a regular driver license will no longer permit the operation of a motorcycle. Operators of motorcycles, holding regular licenses will be retested during the two-year renewal cycle, and will be recoded through the Driver Licensing system to indicate specific licensing. (Reference: Appendix A, Item 2.C.)

ACTION NEEDED

(Legislation) Legislation now enacted.

(Re-testing) Retesting of motorcycle operator applicants on or before, renewal date for Driver License.

(Data Processing) Updating of Driver License records for successfully tested motorcycle operators. Data to be phased into system over two-year period as renewals are due.

POLITICAL SUBDIVISION PROGRAM

(None required. See Program 303 Submission.)

(Driver Education)

PRESENT STATUS

Driver Education is a function of the Department of Public Instruction. That portion of the Traffic Records base representing the area of Driver Education data generally falls into four (4) categories. These categories, and the present status of processing, are as follows:

<u>Data Area</u>	<u>Processing</u>	
	<u>Manual</u>	<u>Automated</u>
Driver Training School Licensing Data	x	Planned
Driver Training Teacher Certification Data		x
Driver Training Curriculum Data	x	Planned
Driver Training Driver Performance Data		x (Def.)

The designation "Planned signifies either current or near future systems study relative to automation of the data records referenced.

CURRENT PROGRAM DEFICIENCIES

As shown in the status chart above, there is considered to be a deficiency in the area of the data concerning driver performance. This deficiency relates to the inability of the driver license file records to provide a positive distinction between drivers who have received driver training and those who have not.

Drivers who make initial application through an accredited school are provided "special" numbers and can thus be identified. However, a driver training student may apply through the regular public process and receive a license without causing a notation of his receiving Driver Training.

The resultant deficiency makes statistical comparisons of driver trained versus untrained age groups meaningless. This does not represent a deficiency in terms of a strict interpretation of the Driver Education standard, but is regarded by Pennsylvania as a Traffic Records deficiency in that it impairs the statistical capabilities of the system. (Reference: Appendix A, Item 2.D.)

ACTION NEEDED

(Data Processing) The capability of distinguishing between driver trained and non-driver trained operators, along with comprehensive performance data (violations, accidents, etc) is presently a part of the Driver Licensing Data System. The deficiency can only be removed through a restriction of the driver licensing process, i.e., an expansion of the application requirements or cross-referencing of driver student data to driver license records. The latter approach presents numerous problems. Therefore the approach which is most practical is the changing of application requirements. This, of course, dictates appropriate legislation.

(Legislation) Legislation in the form of Senate Bill 1212 is presently pending which would require driver training certification as a requisite for driver licensing.

POLITICAL SUBDIVISION PROGRAM

(See Program 304 Submission)

(Driver Licensing)

PRESENT STATUS

Driver Licensing is a function of the Bureau of Motor Vehicles, Department of Revenue. The licensing system in Pennsylvania is an automated, computerized process that incorporates two basic system files, i.e., Driver Licensing and Traffic Safety. A resume of record data relative to these files is as follows:

- Operator Name
- Address
- Sex
- Date of Birth
- Operator Number
- Date License Issued
- Expiration Date
- Current Status (Suspended, revoked, invalid)
- Operator Restrictions
- Violation Data (Date, charge, disposition)
- Accident Data (Date, county, severity)
- Previous Action History (Warnings, hearings, etc.)
- Driver Education¹
- Type or Category of License²
- Test Scores³

1. Incomplete data - See Driver Education submission under Traffic Records 310.
2. Licensing categories for motorcycles, buses and farm tractors.
3. Test scores available from Traffic Safety Bureau test records on manual basis only.

The following is a listing of the major licensing and traffic safety applications implemented and presently in production processing:

- Operators Licensing System
- Traffic Safety Examination Program
- Traffic Safety Point System
- Traffic Safety Non-point System
- School and Hearing Assignment System
- Operator Purging System
- Traffic Safety Purging System
- Driver Control Record System
- Monthly Examination Statistical Reporting System
- Point Statistics System
- Driver Behavior Statistics System
- BMV-BPR Statistical Reporting System
- Accident Processing System

Implementation of these applications is the result of the combined efforts of the Bureaus of Motor Vehicles and Traffic Safety, and the EDP Staff Section of the Department of Revenue.

Records processing is performed by the EDP Staff Section. The present Driver Licensing-Traffic Safety Systems are operational on dual 360-40 computers and are primarily magnetic tape oriented.

CURRENT PROGRAM DEFICIENCIES

The Pennsylvania Driver Licensing system is essentially adherent to the Highway Safety Standard in the area of data records maintained and updating currency. The system is, however, deficient in terms of required access time. The present magnetic tape system requires that a parallel records file be maintained off-line for use in a teletype-manual look-up system to provide enforcement-related information in response to police inquiries.

A second deficiency is the lack of cross-reference between blind-pension recipients and Driver License records. (Reference: Appendix A, Item 2.E.)

ACTION NEEDED

(Data Processing) To meet the standards requirements, as well as the needs of Pennsylvania State Police, in regard to rapid access to driver-vehicle data files, on-line inquiry capability is a necessity. This capability is planned as a 3-step process, i.e., (1) implementation of CRT (Video) communication with the Traffic Safety records, scheduled for January 1, 1969, (2) implementation of CRT communication with Vehicle Registration records, scheduled for March 31, 1970 and (3) implementation of CRT communication with "complete" Driver Licensing records, scheduled for approximately January 1, 1972. Traffic Safety records contain some, but not all of the available Driver Licensing data, hence the use of the term "complete" for Step 3.

The computer hardware upgrading, planned for this implementation, schedules replacement of one of the present Dual IBM 360-40 computers with a 360-50 by January 1, 1969. In addition, one (1) Datacell and two (2) 2314 File Implementation Devices will be installed and operational for CRT inquiry to Traffic Safety records by that time. A second 360-50 to replace the second 360-40, is scheduled to be installed approximately four (4) months later.

Coincident with this effort, and extending through April 1, 1971, will be the automation of Motor Vehicle Registrations (See Motor Vehicle Registration, Traffic Records 310).

After completion of the Vehicle Registration implementation, present scheduling calls for conversion of Driver Licensing records to random-storage files, to be operational by January 1, 1972. This will require random-storage hardware, in addition to that described under Motor Vehicle Registration, consisting of five (5) 2314 File Devices and six (6) Datacells. This will equal the random-storage required for Vehicle Registration and bring the eventual capacity to seven billion characters.



With regard to Blind-pension comparison to Driver Licensing records, the problem requires the adoption of a common reference between files if the process is to be automated (See Motor Vehicle Registration, Traffic Records 310). Cross-referencing has been attempted manually, by name, in the past and resulted in a number of erroneous investigations where names and addresses matched. The problem is presently under study and will be resolved when file and record compatibility is achieved. This will not be possible until records are automated in the basic driver-vehicle data applications, which infers a scheduled date for sometime after January 1, 1972.

Present communication with the National Driver Register is a manual system utilizing the mails and, consequently, causing a lengthy delay in the issuance of licenses to out-of-state licensed drivers. When the National Driver Register is automated and available for remote inquiry, Pennsylvania will install the necessary facility to take advantage of this capability.

POLITICAL SUBDIVISION PROGRAM

(See Program 305 Submission.)

(Codes and Laws, and Traffic Courts)

PRESENT STATUS

As traffic records relate to the magisterial and judiciary processes, present statutes, and local courts operational under those statutes, are not in accordance with the basic concepts of the Highway Safety Program Standards (See Program 306 and 307 Submissions.)

Reporting on codes and laws is a manual procedure where such reporting applies.

As a result of a recent referendum, the magisterial and court systems are being proposed for major revamping; a process that will probably take several years to accomplish.

Data as relates to accidents and violations, hearings, convictions etc., are a part of the Traffic Safety System presently, and require only standardization and uniformity to become meaningful to the Highway Safety Program.

CURRENT PROGRAM DEFICIENCIES

(See Program 306 and 307 Submissions.)

ACTION NEEDED

Expansion of the data base derived from receipt of standardized, comprehensive traffic courts data.

No change anticipated relative to codes and laws relationship to Traffic Records system. Data is principally of a directional rather than functional nature.

POLITICAL SUBDIVISION PROGRAM

(See Program 306 and 307 Submissions.)

(Alcohol in Relation to Highway Safety)

PRESENT STATUS

The Alcoholism program in Pennsylvania is principally a function of the Department of Health. The overall ramifications of alcohol as relates to Highway Safety, of course, involve the State Police Department, local police departments and the Department of Revenue, Bureau of Traffic Safety.

The data requirements, relative to the alcohol problem, are two-fold, i.e., data and reports concerning the alcohol program and accident fatalities blood testing, and data and reports relative to driver behavior and accident injuries.

The Department of Health presently maintains a manual record system for the alcohol program and has no data on post mortem blood analyses for accident fatalities, as this program has not yet been implemented by the Department.

The Bureau of Traffic Safety maintains manual records on drunk-driving arrests and alcohol tests performed on drivers through State Police traffic enforcement activities. Convictions and/or proof of drunk-driving are submitted to the automated Traffic Safety Driver Control portion of the automated Driver Licensing System. Data relative to Driver Behavior and accident injuries are also part of this system. (See Traffic Records - Driver Licensing.)

CURRENT PROGRAM DEFICIENCIES

The Traffic Records system is currently unable to report on the "Number of chemical tests administered in fatal crashes" as denoted for required report content in the draft manual for Alcohol in Relation to Highway Safety. (Reference: Appendix A, Item 2.G.)

ACTION NEEDED

Development of a viable, state-wide, reporting system on post mortem blood analyses for accident fatalities, is now mandated by Act 237, effective July 29, 1968, requiring the submission of fatality blood samples to a central agency for uniform analysis.

When such a program is implemented, the analysis data will be correlated with other relevant Traffic Records to produce the necessary reports.

POLITICAL SUBDIVISION PROGRAM

(See Program 308 Submission.)

(Identification and Surveillance of Accident Locations)

PRESENT STATUS

The Bureau of Traffic Safety, Pennsylvania Department of Revenue, presently receives accident reports from driver, state police and municipal police departments. Driver reports are mandatory for any accident involving injury or where there is at least \$100.00 property damage suffered by any one party. Systematic reporting of accidents by municipal police departments was begun in January of 1966.

Presently, over 1000 municipal police departments submit accident reports. The municipalities use a uniform police accident report form designed by the Commonwealth and provided free of charge to these users.

All received reports are collated within the Department of Revenue, producing approximately 250,000 accident cases per year. These cases are then forwarded to the Division of Traffic Accident Analysis, Bureau of Traffic Engineering, Pennsylvania Department of Highways, for individual analysis and subsequent processing. Prior to being sent to the Highway Department, certain pertinent data relative to the automated Driver Control file is extracted. This data is then used to update the file for driver accident records. A check of financial responsibility is also made and appropriate action taken.

Within the Traffic Accident Analysis Division, accurate location of the accident is determined, based on descriptions from all reports submitted, referencing county and municipal maps, "straight line diagrams", station numbers, intersections, stream crossings, etc.

Two basic types of reports are produced by the Division of Traffic Accident Analysis, those presenting statistical distributions of accident data and those presenting accident location information. Processing of these reports and the associated data is accomplished by use of a Burrough's B 5500 computer operated by the Bureau of Management Information Systems, Department of Highways.

CURRENT PROGRAM DEFICIENCIES

There are presently three areas of deficiency relative to Traffic Records for "Identification and Surveillance of Accident Locations." These are as follows:

1. Inability to presently relate locations accurately to local roads i.e., township and borough roads which are not Legislative or Traffic Routes.
2. Inability to analyze design parameters for accurate estimates of accident potential.
3. Inability to produce required accident reports on a timely basis, i.e., sooner than 2-3 months subsequent to the accident.

(Reference: Appendix A, Item 2.H.)

ACTION NEEDED

The action required to resolve the local road location deficiency, is an expansion of the present station numbering system to include these roads.

The requirement of accident rate predictability relative to Highway Design necessitates a major sophistication of the Traffic Accident Analysis Divisions data processing capabilities. The development of rate-proven mathematical models for design parameter limits and subsequent computer perusal of pertinent geometrics is suggested as the basic approach.

The timeliness of reporting can only be resolved by multi-function use of common accident data and the availability of personnel and machine processing time on an as-needed basis. Both of these areas are being studied by a Committee on Traffic Records.

POLITICAL SUBDIVISION PROGRAM

(See Program Submission 309.)

(Highway Design, Construction and Maintenance)

PRESENT STATUS

As of June 30, 1968, Traffic Records data relative to State (Traffic Routes and Legislative Routes) Highways is comprehensive in scope, but in almost all cases, incomplete. Much of the data is computerized (Highway Department Burroughs B 5500 Computer) for purposes of providing reference reports. Examples of some of these applications are as follows:

- Line Painting Program (Inventory of mileage, patterns, lanes, etc.)
- Signal Location Inventory (Being implemented from manual records)
- Road Log (Automated, but not up-to-date)
- Bridge Log (EAM Application, being expanded for occupancies; incomplete)
- Grade Crossing Inventory (Being implemented for computerization)
- Speed Zone Inventory (Being computerized; 50% complete)

CURRENT PROGRAM DEFICIENCIES

Where Traffic Records relate to Design, Construction and Maintenance, records are in all stages of assimilation for the various programs at the State Highway level.

At the local (Township Roads, Borough Streets) system level, the data available is, at best, haphazard and dependent primarily upon the quality of engineering employed at local levels. (Reference: Appendix A, Item 2.I.)

ACTION NEEDED

A continuing effort must be made to standardize and update the data systems related to Design, Construction and Maintenance of the State Level Highway System.

A coherent safety program as relates to the local segment of Commonwealth roadways will require legislative action to enforce adherence to program standards. Data from these roadways can then be incorporated into the State Highway processing system.

POLITICAL SUBDIVISION PROGRAM

(See Program 312 Submission.)

(Pedestrian Safety)

PRESENT STATUS

Traffic Record reporting, relative to Pedestrian Safety, covers a broad area of Administration in Pennsylvania. The reporting areas and responsible agencies are as follows:

Accident Report	Highway Department, Revenue Department
Enforcement Reporting	State and local Police, Revenue Department
Education Reporting	State and local Police, Public Instruction
Traffic Engineering Reporting	Highway Department
Physical Condition Reporting	State Police, Revenue and Health Dept.

Accident reporting records are comprehensive, and both analyses and record keeping are automated. Analysis for Highway Design and Traffic Control relationships, as well as statistical reporting, are performed on a Burroughs B 5500 computer system in the Department of Highways. Records for Driver Control purposes are processed on an IBM 360-40 computer in the Department of Revenue.

Enforcement reporting is in the nature of evaluation data, as used by the State Police function as well as reporting through the Traffic Safety and Driver License and Motor Vehicle Registration systems.

Education reporting data is not presently an active portion of the Traffic Records system, as all data is manually recorded as per program records in the responsible function areas.

Traffic Engineering reporting is fairly comprehensive and is outlined under the Traffic Records Narrative for Highway Design, Construction and Maintenance (312) and Traffic Control Devices (313).

Physical condition reporting is of a two-fold nature, i.e., relative to driver examination and drunk-driving and accident fatality examination. The Driver Examination program data is automated and is part of the Traffic Safety Driver Control data maintained under the Driver Licensing System. For drunk-driving and alcohol analyses on accident fatalities, see the Traffic Records submission for Alcohol in Relation to Highway Safety (308).

CURRENT PROGRAM DEFICIENCIES

Relative to the inventory questionnaire for Standard 314, the Pedestrian Safety portion of Traffic Records is deficient in two (2) respects. These are, (1) the lack of age designation on the standard RTS-600 Traffic Accident Report form, OTHER (Pedestrian) section and (2) the system's lack of alcohol analysis data (See Program 308 Submission) and physical impairment data. (Reference: Appendix A, Item 2.K.)

ACTION NEEDED

Revision of RTS-600 form to include pedestrian age, as well as modification of Accident analysis sytem to accommodate this additional data.

Implementation of physical examination and blood analysis program by Department of Health in cooperation with State Police and Department of Revenue. Design of data retention and reporting system for these data.

POLITICAL SUBDIVISION PROGRAM

(See Program Submission for 308 and 314.)

(Traffic Control Devices)

PRESENT STATUS

The maintenance of Traffic Records as related to Traffic Control Devices, is a function of the Pennsylvania Department of Highways, Bureau of Traffic Engineering.

As of June 30, 1968, the records of processing activities in this area were as follows:

Traffic Route Log - Computerized, fairly complete
Stop Sign Log - Manual, not complete
Signal Log Inventory - Computerized; complete except for cities of Pittsburgh and Philadelphia

Speed Zone Inventory - Computerized; approximately 50% complete relative to massive recent changes

Where present computerization of records is in effect, the hardware employed is the Department of Highways Burroughs B 5500 installation.

CURRENT PROGRAM DEFICIENCIES

While Traffic Control Device use, in many cases, is under state control the efficacy of the control devices is generally left to the local municipalities.

Computerization of the Stop Sign Log is necessary for efficient use of the data, and a major portion of the Signal Log Inventory (Pittsburgh and Philadelphia) is absent from the files.

The Speed Zone Inventory has not been kept up-to-date with recent changes relative to Pennsylvania's adoption of the Driver Point System. (Reference: Appendix A, Item 2.J.)

ACTION NEEDED

Traffic Control Device performance evaluation requires a follow-up survey subsequent to the issuance of permits for placement.

The Stop Sign Log should be computerized for efficient cross-referencing and the major city signals should be included in the Signal Log Inventory.

The Speed Zone Inventory must be brought up-to-date as an effective Traffic Control tool.

POLITICAL SUBDIVISION PROGRAM

(See Program 313 Submission.)

(Police Traffic Services)

PRESENT STATUS

Police Traffic Services is a function of the Pennsylvania State Police and local police departments throughout the Commonwealth. The records that relate to Traffic Services are of two (2) basic types. These are:

1. Police Management Records
2. Operational Records

The management records consist of such information as personnel data, payroll and earnings records, traffic patrol logs, equipment inventories, etc. At the State Police and large municipal departments level, these records are available and are reasonably well kept.

The operational records consist of data relevant to accident investigation, speed measurement, traffic violations and chemical testing. Here too, the records are available and fairly well kept at the state police and large municipal department level.

NCIC and National Driver Register records are utilized at the state level.

CURRENT PROGRAM DEFICIENCIES

Record keeping in the management categories at the local police level can generally be categorized as being poor to deplorable. This is especially true where the police departments consist of fifteen (15), or less, full time employees.

Operational records for small departments may be categorized as follows:

- Accident Investigation - Poor
- Speed Measurement - Fair to Poor
- Traffic Violations - Fair to Poor
- Chemical Tests - Poor (Except where State Police facilities are used)

Report availability for both management and operational data records is relatively poor. (Reference: Appendix A, Item 2.L.)

ACTION NEEDED

Useful Traffic Records and a good Police Traffic Services reporting system will require (1) the mandating of standard record keeping at all levels of police service and (2) expansion of the present records keeping system and development of a coherent reporting system.

The enforcement of standard record keeping at all levels of police operation will require legislative enablement to become effective.

POLITICAL SUBDIVISION PROGRAM

(See Program Submission 315.)

REFERENCES

Reference and documentation are on file at the office of the Highway Safety Group, Harrisburg, Pennsylvania.

1. Appendix A
2. Appendix B
3. Copies of Pertinent Legislation are included with the references for the appropriate standard.
4. Copies of Pertinent Rules and Regulations are included with the references for the appropriate standard.

310 TRAFFIC RECORDS E.D.P. PROCESSING COSTS ESTIMATE

	Principal D.P. Responsibility	'69-'70	'70-'71	'71-'72	'72-'73	'73-'74	Total
301 Motor Vehicle Inspection	Revenue Department	\$4.98 Million -15%*	\$4.80 Million -15%*	\$4.98 Million -15%*	\$5.16 Million -15%*	\$5.34 Million -15%*	\$21.54 Million
302 Motor Vehicle Registration							
303 Motorcycle Safety							
304 Driver Education (Performance Statistics)							
305 Driver Licensing							
307 Traffic Courts	Health Department	\$1,000.00 \$1,000.00	\$1,100.00 \$1,100.00	\$1,200.00 \$1,200.00	\$1,300.00 \$1,300.00	\$1,400.00 \$1,400.00	\$12,000
308 Alcohol in Relation to Highway Safety (Administration)							
311 Emergency Medical Services							
309 Identification and Surveillance of Accident Locations	Highway Department	\$210,000 Data Reduction \$210,000	\$315,000 Data Reduction \$210,000	\$315,000 \$210,000	\$315,000 \$210,000	\$315,000 \$210,000	\$2.52 Million
312 Highway Design, Construction and Maintenance							
313 Traffic Control Devices							
314 Pedestrian Safety (Accident Analysis)							
316 Accident Cleanup							
315 Police Traffic Services	State Police	\$320,000					
304 Driver Education (Administrative Data)	Public Instr- uction Dept.	\$2,500.00	\$3,000.00	\$4,000.00	\$5,000.00	\$6,000.00 \$2,000.00	\$20,500

* Reduction from E.D.P. Staff Section Budget for Estimated Non-Traffic Records processing, such as, Corporation Tax, Sales Tax, Etc.

PRESENT STATUSAuthority

Pennsylvania Administrative Code of 1929 authorizes the Secretary of Health to act in matters of Public Health. The general authority for the Department of Health to act in this field is contained in the broad grants of power found in the Administrative Code authorizing the department to protect the health of the people, prevent and suppress disease and examine nuisances detrimental to public health. The Governor's Highway Safety Task Force has designated the Department of Health as the agency responsible for Emergency Medical Services as defined in the Federal Highway Safety Act of 1966.

Pennsylvania does not have operative at this time a coordinated state-wide Emergency Medical Services program.

Ambulance service is provided by a variety of types of services:

Volunteer Fire	290
Volunteer Ambulance	265
Proprietary Funeral	170
Proprietary Private	15
Community	85
Hospital	38
Rescue	<u>24</u>
Total	887

Coverage throughout the state, with the exception of some rural areas, is reasonably adequate. There is no specific operational areas for these services except as defined by the services themselves.

With the exceptions of communications, the majority of services are well equipped. A few services, however, are poorly equipped, have little or no training and cannot be considered as giving adequate service. The Department of Health conducts a voluntary, physician taught advanced course in first aid. The manual used in this course is recognized as one of the best in the profession. (See Reference 3)

The Department of Health recommends types of vehicles and equipment, however, adoption of these recommendations is voluntary, there are no regulations governing this.

Pennsylvania does not have a statewide coordinated communications system. Emergency communications, where existing, are confined to individual municipalities, or areas and are usually not compatible with other systems.

A proposed bill has been presented to the legislature that will authorize the Secretary of Health to license ambulance services, require registration of attendants, establish standards for attendant training, vehicles and vehicle equipment (See Reference 4). A legislative committee is presently studying ambulance services in Pennsylvania.

Public participation and general interest in E.M.S. is expected to develop slowly. What might be considered full public participation and the public information program that would be required, is considered a long range goal. Some immediate action must be taken. The school system, and other groups are being called upon to make the general public aware of the state's E.M.S. programs and thereby generate initial interest. No cost estimate available.

CURRENT PROGRAM DEFICIENCIES

a. The Commonwealth has no authority to require training and licensing of ambulance personnel nor the establishment of equipment standards. (Appropriate legislation has been prepared.) Reference; Appendix A, Item I, B, 3.)

b. There are no requirements for types and numbers of emergency vehicles including supplies and equipment to be carried. (Reference; Appendix A, Item I, E, 4.)

c. There are no requirements on a statewide basis for the operation and coordination of ambulances and other emergency care systems. (Reference; Appendix A, Item II, D.)

d. There are no standards or criteria for using two-way communications. (Reference; Appendix A, Item I, B, 5.)

e. There are no standard procedures for summoning and dispatching aid. (Reference; Item II, A, 1, (a), (b), (c), 2, 3, 4.)

f. There is no comprehensive plan for emergency medical services including areas of responsibility, equipment communications, and agreements. (Reference; Appendix A, Item II.)

ACTION NEEDED

a. Licensing and training of ambulance personnel and the establishment of equipment standards will be effected when drafted legislation is enacted.

b. Requirements for types, numbers, supplies and equipment of emergency vehicles will be established by the state.

c. The state will provide plans for the operation and coordination of ambulances and other emergency care systems.

d. Two-way communications standards will be established.

- e. Procedures for summoning and dispatching aid will be established.
- f. Comprehensive plans for emergency medical services will be devised.

EXPANDED PROGRAM

A complete inventory of ambulance services was made in 1965 and updated in 1968. This information is being analyzed and will be published in a comprehensive E.M.S. information report. Cost, \$5,000 for publishing (See Reference 5).

Very little detailed information is available on hospital emergency room facilities or on emergency medical services communications throughout the State. Two surveys should be conducted. The first survey will include hospitals to acquire complete emergency room information, i.e., accessibility, staffing, capacity, transportation, etc. The cost of this survey is estimated at \$30,000. The second survey should be a survey of statewide emergency communications in Pennsylvania. One consideration that will be evaluated in this survey will be the establishment of a communications command centers concept involving State Police sub-stations in each of the counties, through which all emergency equipment and personnel will be dispatched. A communications consultant will be required to study existing conditions and recommend improvements. The cost of this study is estimated at \$250,000 over a five year period.

A standard reporting form is being developed in cooperation with a sub-committee of the Pennsylvania Heart Association's Committee on Cardiopulmonary Resuscitation. The use of this form, however, will be on a voluntary basis until legislation is enacted. No federal cost involved - work should be completed in 68/69 Fiscal Year.

It is generally agreed by medical authorities in Pennsylvania and elsewhere that ambulance personnel should have more advanced in-hospital training. It is desirable that the three-month course given at the University of Pittsburgh Health Center be given to the Philadelphia Police and Fire Emergency Squads in the near future, and can be adopted as the standard for all ambulance personnel in Pennsylvania. This will be dependent on legislation.

A continual assessment of E.M.S. facilities is required. This responsibility should be with the Department of Health's E.M.S. Coordinator, and the Governor's Highway Safety Coordinator's representatives.

A program to encourage public participation in first-aid training is under consideration. Ultimately, it is desired that this program will be developed in conjunction with the school system, and assistance of the Department of Public Instruction. Priority and cost estimate will be determined later as part of the E.M.S. program.

Pennsylvania is presently in the initial phases of establishing a State Emergency Medical Services Council that will determine the E.M.S. system best suited for Pennsylvania, define deficiencies, determine priorities, establish procedures, advise the Governor's Task Force on E.M.S. matters and recommend necessary legislation. This council will be made up of representatives of the Pennsylvania Hospital Association, Pennsylvania Medical

Society, the Pennsylvania Department of Health, the Pennsylvania Ambulance Association, Pennsylvania State Police, and several medical authorities. Local E.M.S. councils will be organized and established in several areas to work with the municipalities in defining deficiencies, implementing programs, and generally upgrading local services in conformance with the statewide program. (See Reference 6).

The state E.M.S. Council will be requested to advise the Governor's Coordinator concerning dispatch centers, first aid stations and heliports. For the purpose of organization, consideration is being given to dividing the state into six E.M.S. regions. Dispatch centers should be located in each county. Decision on first aid stations and heliports will be made by the state E.M.S. Council. Cost of dispatch centers will depend on the communications survey. Cost of first aid stations and heliports will be determined through a survey.

Areas of responsibility have been determined at the state level. Responsibility at the area or local level will be placed by the state and local councils based on information to be obtained that will reflect the most able professional and technical bodies in the local area. Response time criteria is dependent on many factors under consideration and will be set by the state E.M.S. Council when more data on communications, emergency rooms, etc., is available. No Federal cost.

ON-GOING SAFETY PROJECTS

1. Ambulance Attendant Training Program - Approved by National Highway Safety Bureau.
2. Helicopter Ambulance Project - Operative, No. 68-1-001.

REFERENCES

Reference and documentation are on file at the office of the Highway Safety Group, Harrisburg, Pennsylvania, as follows:

- (1) Appendix A
- (2) Appendix B
- (3) Ambulance Attendant Training Manual
- (4) Draft of Proposed Legislation on Licensing of Ambulance Services, Standards for Equipment and Registration of Personnel
- (5) Pennsylvania Ambulance Service Survey, 1965
- (6) Emergency Medical Services supporting data:
 - a. Emergency Medical Services Plan for Pennsylvania
 - b. Time Schedule for Compliance with Standards

PRESENT STATUS

The Commonwealth of Pennsylvania presently is in full conformance with most of the requirements of this standard for state owned highways and streets. It is in full conformance with respect to design standards relating to safety on all state owned highways. Design criteria has been modified to provide for accident prevention and survivability as recommended by the Bureau of Public Roads and the American Association of State Highway Officials. Copies of the latest design criteria and policy statements are referenced in the Appendix to this program standard.

The Department of Highways' present policy on highway and street lighting is as follows:

A. Install lighting facilities only if AASHO warrants indicate it is needed and if the local municipality will assume the cost of energizing and maintaining the system.

B. If the municipality will not assume the above costs the Department will then only provide the facilities for future lighting.

The Highway Department has had a program since 1963 to test the skid resistance of state highways. Approximately 200 projects per year are tested and the results are used to program resurfacing or other surface treatment. The projects tested are selected by State District personnel based on their knowledge of the highway system. This program is presently being expanded and it is expected that by late 1969 it will be established on a statewide inventory basis for all state highways warranting inclusion in the program.

A state program for the elimination of hazards and dangerous crossings is presently in effect. The six year improvement program, Volume 3, approved in 1967 provides specifically for the elimination of hazards. This program includes 111 million dollars to provide for 1,290 spot safety improvements. In May of 1968 a supplement to this program was proposed, adding an additional 7 million dollars for 69 more projects.

The Commonwealth of Pennsylvania is composed of 2,564 municipalities each having control over local street system development within their jurisdiction. Although many of the municipalities have adopted ordinances or codes to regulate subdivisions the specific number and the details of the regulations adopted are not presently known. On municipal roads and streets owned and maintained by townships, counties, cities and boroughs, deficiencies exist in more areas and the programs required to satisfy the safety standard will be much more extensive.

The Commonwealth's control of the design, construction and maintenance of local roads is limited in most areas to projects involving the use of state funds. The development of a program to conform to safety standards will require legislation extending the State Highway Department's control over certain areas of programming, design, construction, maintenance, records and reports by local governments.

On municipal roads a large percentage of the mileage consists of rural highways that carry small volumes of vehicles at relatively low design speeds. 57 percent of these roads (60,682 miles) carry only 7.6% of all traffic in the state. These 57 percent of the roads include 98.7% of the existing township roads and are comparable in mileage to the present borough and city road systems (62,638 miles). It will, therefore, require careful study of these highways to determine what programs and priorities should be assigned by local governments within the available resources to comply with this standard.

CURRENT PROGRAM DEFICIENCIES

a. Safety design, construction and maintenance criteria or standards for local roads (non-state highways) do not exist or are not used by the major proportion of the local governments. The Department of Highways has no legal authority to require local governments to follow safety design, construction and maintenance standards on the local road system. (Reference; Appendix A, Item 1.)

b. There exists no specific statewide program to provide safe environment for pedestrian and motorists, on either the state or local system. (Reference; Appendix A, Item 2.)

c. There exists no program to upgrade roadway lighting along urban expressways and arterials, at intersections of major routes and at high night-accident locations, for the state or local road systems. (Reference; Appendix A, Item 3.)

d. Standards for skid resistance, design and construction have not been developed at either state or local level. (Reference; Appendix A, Item 4.)

e. Hospital signs are not used at interchanges of freeways on the state system (there are no freeways on the local system). (Reference; Appendix A, Item 10.)

f. There is no statewide program to provide special access and egress for emergency vehicles on freeways on the state system. (Reference; Appendix A, Item 12.)

g. Although the degree is not known on a statewide basis, there are few programs within local governments to eliminate slippery pavements, properly control traffic through construction areas, eliminate hazardous railroad grade crossings, identify and correct hazards, use safety design features along streets, and train personnel in accident emergency dispatch, debris removal, etc., at the level intended by this standard. (Reference; Appendix A, Items 5, 6, 7, 8, 9, 10.)

ACTION NEEDED

The Commonwealth of Pennsylvania proposes the following action programs to provide full conformance to this standard:

a. Design criteria for safety on local roads.

The Department of Highways will establish design criteria for reviewing safety features on municipal roads. This program will first require the collection of sufficient data to permit the classification of municipal roads in accordance with a system which will permit setting standards and priorities. This may require a study by a consultant or university and coordination with the Bureau of Public Roads. Cost for this action program is \$100,000.00.

Enactment of legislation to expand the control of the state over programming, design, construction, maintenance, records and reports by local governments relating to highway safety. The details of this legislation are dependent upon the results of Programs (a.) and (h.). No cost is estimated for this program.

b. Design considerations for pedestrian environment.

The Department of Highways will initiate a survey of existing codes and ordinances controlling the subdivision of land with the local municipalities. Results of this survey will determine the action required to conform with the standard requiring that street systems are designed to provide a safe traffic environment for pedestrians and motorists when subdivisions and residential areas are developed or redeveloped. Survey may require the use of a consultant or other outside agency. Cost for survey is \$60,000.00 (1969-70).

c. Roadway lighting.

The Department of Highways will establish criteria, policies and needs with respect to highway and street lighting as required by safety program. This study will include state owned and municipal roads. The program is presently active and an agreement is being negotiated with a consultant to prepare the required study. A Federal highway safety grant has been approved for this study. Cost of study is \$102,000.00 (1968-69).

d. Standards for skid resistance.

The Department of Highways will adopt revisions to our specifications to control materials and pavement finishing methods to produce high skid resistant surfaces. These revisions have been drafted and are presently being reviewed. It is expected that they will be adopted in early 1969. This will provide complete conformance to the standard on all state highways and most work on municipal roads. On municipal road work not involving state funds the legislation proposed in Program (b) will control design and construction to provide high skid resistant qualities. No cost has been estimated for this action program.

Present program of testing highways for skid resistance to be expanded to include municipal roads as well as state highways. The initial phase of this program will be to determine the criteria, equipment and personnel needed to implement the expanded testing program. This phase will be started in late 1968 or early 1969. Cost for program will be \$130,000.00 the first year (1969-70), \$225,000.00 for the second year and \$95,000.00 for each following year.

e. Hospital signs at interchanges.

The Department of Highways will determine areas requiring hospital signs as specified in the safety standard and implement their installation. This program to be initiated in 1968 and completed in 1969. No cost has been estimated for this program.

f. Special freeway access for emergency vehicles.

The Department of Highways will study the need for providing access and egress to freeway sections where it would significantly reduce the travel time for emergency vehicles. Program would also include the consideration of providing controlled emergency median crossovers in areas where a continuous median barrier is required. Cost of study to provide a design for a removable median barrier section is \$10,000.00.

g. Safety programs on local roads.

1. The Department of Highways will investigate the present extent of participation in municipal road construction with respect to the requirements of the safety program. Additional funding may be required to make the enforcement of the requirements of the safety program feasible. This may require a study by a consultant or university to evaluate the costs to be incurred by local governments and will be dependent upon Program (a). Cost for this action program is \$30,000.00.

2. Program for expanding operations of the Bureau of Municipal Services of the Pennsylvania Department of Highways with respect to state control of construction, reconstruction and maintenance operations on municipal roads. Full needs of this program depend on results of prior programs, but it presently can be expanded with respect to operations on municipal projects using state funds. Cost for this action program is \$312,000.00 the first year and each additional year.

3. A program to investigate and inventory railroad grade crossing on municipal roads will be established and put into operation in early 1969 through the use of personnel under the direction of District Engineers. Also to be considered as part of this program is the expansion of the present inventory on state highways to include additional information. Cost of survey is \$50,000.00 (1969-70).

POLITICAL SUBDIVISION PROGRAM

All necessary action programs required to provide full conformance to this Program Standard with respect to political subdivisions are included in the Action Needed portion of this report.

ON-GOING SAFETY PROJECTS

1. Highway Lighting Policy, H. D. 68-1-001. Approved 5/9/68.

REFERENCES

Reference and documentation are on file at the office of the Highway Safety Group, Harrisburg, Pennsylvania.

1. Appendix A
2. Appendix B
3. Pennsylvania Department of Highways Safety Policies and Standards *
4. Pennsylvania Department of Highways Form 408 Specifications
5. Pennsylvania Department of Highways Bulletin No. 43

* See Standard 309 for a copy of Pennsylvania Department of Highways Safety Standards and Policies.

OLIGOMERIZATION

1. Definition - The process of joining small molecules (monomers) to form a polymer.

Types

2. Classification -
- a. Step-growth polymerization - Involves the reaction of two monomers to form a dimer, which then reacts with another monomer to form a trimer, and so on.
 - b. Chain-growth polymerization - Involves the reaction of a monomer with a growing chain to form a longer chain.
 - c. Ring-opening polymerization - Involves the reaction of a cyclic monomer to form a linear polymer.
 - d. Condensation polymerization - Involves the reaction of two monomers to form a polymer and a small molecule byproduct.
 - e. Addition polymerization - Involves the reaction of a monomer with a growing chain to form a longer chain without the loss of a small molecule byproduct.
3. Factors affecting oligomerization -
- a. Monomer reactivity - The ability of a monomer to react with a growing chain.
 - b. Reaction conditions - Temperature, pressure, and catalyst.
 - c. Stoichiometry - The relative amounts of the monomers.
 - d. Termination - The process of stopping the reaction.
 - e. Transfer - The process of moving the growing chain to another monomer.
 - f. Chain transfer - The process of moving the growing chain to a different chain.

PRESENT STATUS

The Commonwealth of Pennsylvania has an on-going program to identify the needs and deficiencies of traffic control devices on all state owned highways. This program includes the placement of traffic lines and signs in accordance with the manual on Uniform Traffic Control Devices. In addition, it provides for financial assistance to municipalities for the modernization of traffic signals on state highways. State approval is required for all new traffic signals.

All new control devices on state highways are installed based on engineering studies and in accordance with the Manual on Uniform Traffic Control Devices and the standards of the Federal Highway Administration. The Highway Department published in 1967 "Regulations Governing The Design, Location And Operation Of All Official Traffic Signs, Signals And Markings On And Along Highways Within The Commonwealth Of Pennsylvania" which govern the design, location and operation of all official traffic control devices in the Commonwealth. See Reference 3. In addition, state highway district personnel from the traffic units are available to work with local officials regarding their needs on local streets and municipal roads.

On state highways speed zones are established based on engineering and traffic investigations. The use of engineering and traffic investigations to establish zones on municipal roads is at the discretion of local officials.

A program to provide for pre-established detour routes on expressways in urban areas where accidents can create long traffic delays has been established. Policy has also been established for the installation of rumble strips at intersections and other areas having a high accident rate.

Except for traffic signals, local governments have authority to install traffic control devices on local highway systems at their discretion, although they are required by state law to use traffic controls approved by the Department of Highways and in the manner specified by the State Regulations. Because substantial changes in designs and specifications have been made in approved traffic control devices over the past several years, many of the existing devices in local roads are obsolete and need to be updated. While the Pennsylvania Department of Highways engineers are available to assist the local governments when requested, the majority have no program or schedule for modernizing or conducting preventative maintenance of their traffic control devices.

CURRENT PROGRAM DEFICIENCIES

a. There exists no modern management control method to provide continuous identification of needs and deficiencies of traffic control devices on the state highway system. There are no known methods used by local governments of identifying needs. (Reference; Appendix A, Item I.)

b. Local governments generally do not have programs of upgrading traffic control devices on local highways (except traffic signals). (Reference; Appendix A, Item II.)

c. Programs for preventative maintenance and day-night time inspection of traffic control devices do not exist for state or local highways. (Reference; Appendix A, Item III.)

d. There are no established programs of speed zoning on local highways in most jurisdictions. (Reference; Appendix A, Item IV.)

ACTION NEEDED

a. Identifying needs and deficiencies.

A computerized program to provide an inventory of signs on hand in the Department of Highways Central and County Sign Shops is expected to be operative within a short time. This program will be later expanded to include the field location of signs. It is anticipated that the field inventory will initially involve new and replacement signs with existing signs to be incorporated as time permits. Cost of this program is \$25,000.00 per year.

Local governments will be encouraged to determine their own needs with respect to local roads. No costs have been estimated for these surveys.

b. Upgrading traffic controls.

Present legislation provides for state approval of all traffic control devices as to design, location and operation. The use of such devices, except for traffic signals on non-state highways is under the control of local officials and compliance has been subject to their interpretation.

The Department of Highways will assist local governments in scheduling programming improvements in traffic controls to meet current standards. Methods of providing this assistance and costs have not been determined.

Control of municipal roads with respect to the identification of deficiencies providing a program to upgrade deficiencies and the establishment of speed zones by engineering methods will be established through the legislation proposed under Standard 312. No cost has been estimated for this program.

c. Preventive maintenance.

A program for preventive maintenance, repair, and daytime-nighttime inspection will be developed. When this program is complete, it will be made available to local officials for their use.

d. Speed zoning.

The Department of Highways will encourage and assist local governments in establishing proper speed zoning of local roads and streets using nationally accepted engineering methods. Costs for this by the Department of Highways and local governments have not been estimated at this time.

POLITICAL SUBDIVISION PROGRAM

All necessary action programs to provide full conformance to this Program Standard with respect to political subdivisions are included in the Action Needed portion of this report.

REFERENCES

References and documentation are on file in the office of the Highway Safety Group, Harrisburg, Pennsylvania:

- (1) Appendix A
- (2) Appendix B
- (3) Department of Highways "Regulations Governing the Design, Location and Operation of All Official Traffic Signs, Signals and Markings on and Along Highways Within the Commonwealth of Pennsylvania"

PRESENT STATUS

The amount of knowledge presently available in the pedestrian area is limited in Pennsylvania. The vast number of political subdivisions and the lack of research in this area are the main reasons for the lack of information.

The rights and duties of pedestrians as defined in the laws of Pennsylvania are very limited, and are in need of review and action. The present laws do not specifically define the pedestrian's rights and duties and do not compare favorably with the provisions of the Uniform Vehicle Code.

Enforcement of pedestrian rules and regulations is a problem. Violations many times involve the very young and very old, and police are reluctant and at times unable to take stern enforcement action. Additionally, the observation of enforcement action being taken against the very young and old would affect public-police relations.

Presently, because of the number of court jurisdictions, the procedures and penalties vary from one jurisdiction to another. Public sentiments are often reflected in the decisions. Due to the lack of pedestrian enforcement, public sentiments are not tuned to this type of enforcement.

The education of the pedestrian begins with his first school experience. Safety education in the elementary school is mandated by Section 1511 of the Pennsylvania School Code and includes instruction concerning safe routes to and from school, proper practices for safe play, recognition of hazards, student cooperation with safety patrols, adult crossing guards, policemen, school bus personnel and proper obedience to traffic signs and signals. In addition to regular school bus loading and unloading procedures, students receive instruction in emergency and fire evacuation drills as prescribed in Section 1517 of the Pennsylvania School Code.

In both the elementary and secondary levels the educational programs are supplemented by state and local police, auto clubs, service clubs, and the Bureau of Traffic Safety. In addition to personnel, these agencies contribute financial assistance, visual aids, lectures and sponsor other activities such as school safety patrols.

In September of 1967, it was recommended by the Division of Highway and Aviation Education that, "A minimum of two (2) class periods per week should be devoted to Education for Safe Living in grades kindergarten through nine."

This area of education is continued in high school driver education classes, which are authorized by Section 1519.1 of the Pennsylvania School Code. A unit on pedestrian safety is included in the State Bulletin 395, "A Guide to Driver Education and Highway Safety", which covers those areas suggested in the Federal Standard 314.

CURRENT PROGRAM DEFICIENCIES

There is a general deficiency in the overall amount of knowledge of the pedestrian safety situation at the local levels in the Commonwealth. This deficiency is most serious and is evidenced by the fact that many of the questions in Appendix A could only be answered "not known".

The following items are listed as pedestrian safety program deficiencies:

- a. Present law, does not require the determination of alcohol present in blood of fatally injured adult pedestrians. (Reference: Appendix A, Item I, 3)
- b. There is no requirement for investigation of accidents to determine whether or not pedestrians involved in accidents have physical or sensory disabilities. (Reference: Appendix A, Item I, 4)
- c. There is no record of the number of local jurisdictions, schools, police departments, traffic courts or others, that conduct Driver-Pedestrian Improvement Schools. (Reference: Appendix A, Item II)
- d. There are no known procedures or programs widely used to reduce pedestrian-vehicle conflicts by land-use planning or use of bridges and barriers. (Reference: Appendix A, Item II 7-12)
- e. There are no training or educational programs for the general public relating to pedestrian behavioral problems especially pre-school children and children walking to and from school, and the elderly. (Reference: Appendix A, Items III)
- f. Except for local spot programs, there are no programs of enforcement to reduce vehicle-pedestrian conflicts. (Reference: Appendix A, Item VI)
- g. Programs now being conducted are not evaluated to determine their effectiveness in reducing pedestrian accidents.

ACTION NEEDED

- a. Even though the determination of alcohol present in the blood of fatally injured adult pedestrians has been considered a deficiency, no further legislative action is required. Implementation of Act 237 (Senate Bill 1413, Session of 1968) brings the Commonwealth into compliance with this portion of the standard. Upon implementation "the coroners of each county in this Commonwealth shall take blood and/or urine samples from the bodies of drivers and pedestrians over sixteen (16) years of age who die within four (4) hours following an automobile accident . . ."

- b. Appropriate legislation is required to determine by qualified individuals whether or not a physical or sensory disability exists in pedestrians who have been involved in an accident. Cases which are obvious to the investigating officer are submitted on the accident report, however, there is no record maintained of the number of such cases and, unless the pedestrian is a licensed operator, no action can be taken.
- c. A survey is necessary to determine the number of local jurisdictions conducting Driver-Pedestrian Improvement Schools.
- d. Studies will be undertaken to determine what policies, design standards, and legislation should be recommended to utilize land-use planning techniques, barriers and bridges to reduce vehicle-pedestrian conflicts. Such a program would necessarily begin with accident data collection, and include reports from investigating officers, traffic engineers, school and bus drivers and supervisors, and safety educators. The state coordinator of Public Law 89-564 would then disseminate this information to the appropriate agency for implementation in the best interests of the pedestrian.
- e. Systematic functional training programs will be developed for all schools and for general public consumption relating to pre-school and school children as well as elderly pedestrians.
- f. The enforcement problem as it pertains to pedestrians will be studied objectively so effective programs to reduce pedestrian-vehicle conflicts can be adopted. Legislative action may be required.
- g. In order that effective programs may be continuous, it will be necessary for all agencies concerned with the safety of the pedestrian, i.e., Department of Public Instruction, Bureau of Traffic Safety, State and Local Police, and the Department of Highways, to report periodically to the office of the state coordinator for any recommendations or suggestions for improvement of the program of pedestrian safety. A special unit will be established in the Department of Public Instruction to periodically evaluate the effectiveness of the projects and programs undertaken in this area.

POLITICAL SUBDIVISION PROGRAM

Political subdivision participation would be required in a comprehensive survey to determine the overall pedestrian safety needs of the local levels throughout the Commonwealth. Local participation would be required for the implementation of the recommendations for such findings.

Local cooperation will be required in areas that will be directly affected by legislation and other regulatory measures.

REFERENCES

References and documentation are on file in the office of the Highway Safety Group, Harrisburg, Pennsylvania.

1. Appendix A
2. Appendix B
3. Bulletin 395, "A Guide to Driver Education and Highway Safety"*

* See Standard 304, Reference 5.

POLICE TRAFFIC SERVICES - 315

Pennsylvania is the third most populated state in this country and accommodating this population is a vast network of highways. Presently, 1,064 police departments supply the Traffic Services effort. These departments range in size from several thousands (Pennsylvania State Police, Philadelphia Police Department and Pittsburgh Police Department), down to departments of only one man.

As wide and varied as the sizes are the abilities of political subdivisions to afford adequate police traffic service. This ability is commensurately reflected in the wide ranges of program training, equipment, and personnel found in different departments.

Financial inability is not the only deterrent to a fully coordinated police traffic services program. Legislation making certain criteria mandatory is lacking and even if it were enacted today many police officers already entrenched in various departments would pose problems for years to come due to their lack of training.

It can only be said that a program complying under Standard 315 must be a long term undertaking. It is conceded that action is needed immediately and all will be done that can be done, but maximum achievement will be many years coming.

The following pages contain our program for Police Traffic Services based upon available knowledge concerning the workings of the various police departments in this Commonwealth. As greater knowledge is acquired, revisions to this basic program will have to be made.

PROGRAM IMPLEMENTATION NARRATIVE
FOR
POLICE TRAFFIC SERVICES 315

PRESENT STATUS

The Police Services Program in Pennsylvania is one necessitating improvements in most areas. While most areas proposed by Standard 315 are performed in one degree or another by many of the police departments in this Commonwealth, all departments are not in compliance with all standards. Lack of compliance is due to a multitude of reasons. Some lack the financial ability; some lack education and training; some lack personnel and equipment; while others have not the caliber of personnel capable of administering modern traffic services programs, and still others, while having the capabilities, place greater priority upon other police services.

CURRENT PROGRAM DEFICIENCIES **

I. RECRUIT TRAINING

- A. Of the 1064 police departments in Pennsylvania, only 143 require training prior to assignment. In past years attempts have been made to pass a compulsory police training act, but these attempts have failed. Thus, there is no mandatory police recruit training presently in this Commonwealth.

ACTION NEEDED

Legislation must again be sought to make police recruit training mandatory for all departments in this Commonwealth. So that it does not have to be repeated throughout this narrative it will be said at this time that this legislation will include more than just recruit training. It will include many if not all of the areas of training necessary to upgrade the police profession in this Commonwealth.

- B. There exists only 5 police training academies in Pennsylvania. They offer recruit training not only to the departments which maintain them but also to the police departments in surrounding areas. The smaller departments have not the financial ability to maintain academies or to send recruits to other departments where lodging and meals would further add to the expense.

**The numerical and alphabetical paragraph designations coincide with those found in appendix A.

ACTION NEEDED

This area is one of many needing research. Before recruit training can be made mandatory for all departments adequate facilities will have to be made available, and even before this certain determinations will have to be made.

- (1) What is the current number of recruits requiring training annually?
- (2) What is the breakdown by area?
- (3) What are the projections of departmental sizes?
- (4) Is it more feasible to enlarge existing facilities or construct new ones?
- (5) Where is overall administrative responsibility for this training to be placed?
- (6) What are the cost factors involved?
- (7) How can small departments be assisted so as not to cause undue financial burdens?

While it is unreasonable to project costs in the area of physical facilities until the above mentioned determinations are made, an estimate of \$2,000,000 annually is advanced for the actual training of recruits.

- C. It is not known, on a statewide basis, what percent of recruits complete training successfully. However, it is known that a high percentage of State Police recruits (92%) do successfully complete this training. It is believed that the selection process employed by the State Police is a principal factor contributing to this high percentage.

ACTION NEEDED

If traffic programs and police in general are to be upgraded, personnel capable of undergoing intensive and high level training will have to be selected. Selection procedures useable by all departments will have to be developed. It is estimated that such a system could be developed for \$25,000 and could be developed in about a year.

- D. It is not known how many departments have funds specifically budgeted for training activities.

ACTION NEEDED

Research will have to be conducted in this area. Local governments will then be encouraged, by legislation if necessary, to allocate funds specifically for training purposes. Training of police administrators in the various departments to the values and necessities of training will also be a tool to achieve this objective.

- E. Only 39 departments have recruit training programs with sufficient hours to include the 140 traffic hours recommended by Standard 315. While it is known that the others do not conform to the standard, it is additionally thought that many of the 39 will require revisions in order to conform.

ACTION NEEDED

A curriculum meeting or exceeding Standard 315 will have to be developed and made available to all police departments in this Commonwealth. Costs to develop such a curriculum are estimated at \$10,000.

- F. It is not known how many departments comply in this area, or to what degree. However, it is believed that most police departments will require a complete course in order to conform, and a few will require revisions.

ACTION NEEDED

This area will have to be included in the research to be conducted into other areas of training.

- G. It is known that of the 143 departments offering recruit training prior to assignment only a small portion actually use trained instructors. Others utilize such systems as the coach-pupil method. Still others while having classroom instruction draw upon the ranks for instructors. In small departments the number of men is so limited, finding a trained instructor among them is difficult.

ACTION NEEDED

As part of the program to make recruit training mandatory and available, qualified instructors will be an integral facet. Where necessary the state will supply these instructors. Although it is not known at this time how many instructors will be needed, it is estimated that each instructor will cost \$12,000 annually.

- H. It has previously been related that only a few police training facilities are in existence in this Commonwealth. The number of recruits estimated to require training each year is in excess of the capabilities that can be handled at the existing facilities.

ACTION NEEDED

The need in this area is such that existing facilities should be enlarged where possible and practical, and new facilities constructed in certain areas. While most construction and enlargements will have to be dependent upon researching the problem in this area and giving to it definite dimensions, certain measures can be taken to partially alleviate the problem.

At a cost of \$1,200,000 the State Police Academy will be enlarged in the coming year.

- I. The use of training aids is limited to those departments having planned training programs. A relationship exists between the financial ability of the political subdivision and the quantity and quality of the training aids available.

ACTION NEEDED

Training aids and equipment will have to be made available. Costs in this area will be dependent upon the quality and quantity of training aids and equipment available presently, the number of recruits to be trained, the number of installations and the actual methods of training to be used.

II. ADVANCED TRAINING

- A. Pennsylvania State Police and some of the larger local departments do have planned programs for advanced training. However, in a majority of departments, advanced training programs are nonexistent.

ACTION NEEDED

Research will be conducted to determine the quality and quantity of advanced training necessary to provide the professional skills needed by the full time traffic officer.

Advanced traffic supervision training courses will be promulgated and made available to all police departments.

All police departments will be encouraged to send personnel to the various facilities offering advanced traffic supervision courses.

- B. The average length of training programs for advanced training is unknown presently.

ACTION NEEDED

Research will have to be conducted in the coming year.

- C. The per cent of personnel who participate in advanced training programs is unknown.

ACTION NEEDED

Research will have to be conducted to determine the availability of this type of training. Additionally, the number of men requiring this training will have to be established.

- D. It is not known how many local traffic officers have been sent to national academies. However, it is believed that the great distances often involved add considerably to the expense and eliminate this type training from consideration by many local departments.

ACTION NEEDED

The results of the surveys mentioned in areas II-A, II-B, and II-C, will be used to give dimensions to the needs for advanced training. These needs can be related to local colleges and universities. These educational institutions will be encouraged to establish courses in various parts of the Commonwealth so that advanced training is readily available to all departments.

- E. The extent of in-service training varies from the formal sessions planned by the Pennsylvania State Police and the larger local departments down to those departments having no programs whatsoever. Currently, in-service training is offered to local departments by the State Police and thus far 3,225 local officers have completed this training. However, this training is not mandatory and many have not, for a variety of reasons, had the opportunity to attend these classes.

ACTION NEEDED

Encouragement must be supplied so all traffic police officers will be afforded this opportunity to receive in-service training. Methods and equipment will be sought to increase present capabilities so all interested officers can be accommodated.

Costs for providing in-service training for all traffic police officers in this Commonwealth will run about \$2,500,000 annually. This figure includes the salaries of the officers while attending.

- F. It is not known what percentage of traffic officers presently receive in-service training annually.

ACTION NEEDED

Methods will be sought so that this training can be offered to all police officers. It is our objective to seek 100% participation.

- G. The material presented at the limited number of in-service programs has never been reviewed by the State.

ACTION NEEDED

Steps will have to be taken to determine the training needs in this area. Courses suitable for in-service training sessions will have to be developed to cover a wide variety of subjects, and these courses will have to be made available to all departments. The State will assist in the formation of proper courses. Costs to develop these courses is estimated to run about \$40,000.

- H. The number of supervisory personnel who have received formal training in techniques of personnel management and supervision is far from the desired level.

ACTION NEEDED

Supervisory courses will have to be developed and made available to all departments. Departments will be encouraged to train all existing supervisors and all personnel scheduled for promotion to these positions.

Costs to develop supervisory courses are estimated to run about \$30,000.

- I. Many departments are completely devoid of personnel who have received training in the use of records.

ACTION NEEDED

Departments of sufficient size will be encouraged to provide an adequate number of personnel with this training. Systems will have to be developed to provide assistance in this area to the smaller police departments.

- J. & K. The situation in this area is identical to that in Paragraph I, and the action needed is also the same.

III MANPOWER ASSIGNMENT

- A. While the larger departments do have written procedures for determining the traffic supervision needs of their jurisdictions, it is believed that most of the smaller departments have no written procedure whatsoever.

ACTION NEEDED

Currently the Commonwealth of Pennsylvania does have a system by which accident investigations are gathered from local departments. The need exists to make this system mandatory on all local departments and to further develop the system so that uniform data is gathered.

Costs are estimated at \$10,000.

- B. Only in the larger departments are specialized accident units utilized. In most cases the size of the departments makes the employment of this system impossible.

ACTION NEEDED

Specialized training in accident investigation will be encouraged in those departments where practical. Additionally, equipment, systems and paraphernalia necessary to render aid to the injured and extract them from the wrecked vehicles; to protect the scene and/or isolate the dangers involved in accidents of hazardous substances; and to assist the officer in the fact finding mission of accident investigation.

- C. SEE SECTION III-F.
- D. Post accident response times are impossible to ascertain at the present time. Wide variances are encountered in this area due to the many factors involved. Response times are dependent upon the ratio of men to area; men to work load; whether the police department is located in a township or a city; the terrain involved; the weather conditions; the time of day; the volume of traffic.

ACTION NEEDED

The matter of response time is generally dependent upon two factors; manpower and communications. Although it is evident that response times will continue to vary dependent upon the factors previously mentioned, systems will have to be developed to reduce them to a minimum under all conditions. Foremost in this development will be the encouragement supplied to increase the size of the departments. Costs are estimated at \$2,000,000 per year for 10 years.

- E. Accidents can occur along the vast highway system of Pennsylvania anytime, anywhere, and under many varying conditions. Prompt notification and rapid response of

Departments will be encouraged and assisted in maintaining a proper span of control, and to maintain an adequate staff to properly plan and administer increased traffic programs.

- F. In the departments that have quality records systems many factors are taken into consideration when planning the assignment of personnel. In the smaller departments record systems are not possible or practical.

ACTION NEEDED

Those departments having the financial capabilities will be encouraged to develop quality records systems, and to make proper use of them.

For the use of other departments a division on the State level will have to be established to gather and analyze statistical data of accidents, enforcement, and other areas affecting the deployment of men. Meaningful reports will have to be produced by this division to assist them in properly deploying their men. Costs are estimated to run \$250,000 annually.

- G. In the areas of manpower assignment, training, and others, many of the departments do not and will not have sufficient manpower to properly plan the many facets involved.

ACTION NEEDED

A system of liaison and coordination will be developed to:

1. To promote uniform enforcement efforts throughout the Commonwealth.
2. To assist in the planning of enforcement and accident prevention programs.
3. To coordinate efforts to avoid duplication.
4. To assist departments in achieving compliance with the Highway Safety Act standards.

Costs in this area are estimated to run \$600,000 annually.

IV ACCIDENT INVESTIGATION

- A. As stated earlier in this narrative presentation some departments have complete written procedures while others are completely devoid of them. Additionally, the absence of a mandatory uniform system makes the determination of percentages impossible at this time.

ACTION NEEDED

Administrators of the various local departments will have to be educated to the value of written procedures and trained to formulate proper ones.

- B. It is believed that the problem in this area is similiar to that stated in Paragraph 3a, and the action needed is also similiar.
- C. Most police departments do not make traffic volume counts. However, the Pennsylvania Department of Highways does conduct these counts regularly. The costs to supply this information is estimated at \$15,000 annually.

ACTION NEEDED

Local departments will have to be informed that this information is available and how to give it proper use.

- D. Most departments do not conduct traffic violation frequency counts at specific locations, other than those counts based upon enforcement records. Since the objective is to attack the accident problem it is resonable that this approach should be taken to ascertain if the enforcement effort is being directed to the right area consistent with the problem that does then and there exist.

ACTION NEEDED

Departments not already educated to the principles of selected enforcement will be given the opportunity of this training and will be encouraged to take advantage of it. Additionally, new systems, procedures and equipment will be sought to aid in the identification, enforcement, and removal of those drivers whose behavior indicates a danger to the public.

- E. Some departments do make quantitative evaluations of the effect of its operations upon the accident frequency. However, these evaluations are related to the quality of the records systems that exist in each department, and the availability and scope of a planning staff.

ACTION NEEDED

Before all departments can be made to conduct these evaluation studies they will first of all have to have access to a records system, and then be trained to its proper use. Those already having records systems will be encouraged to conduct these studies if they are not already doing so.

adequate personnel and equipment to aid the injured and prevent the situation from deteriorating is often lacking and is greatly dependent upon communications.

ACTION NEEDED

All traffic police officers have to be equipped with two way communications and be in constant touch with a central dispatcher.

Smaller departments located in close proximity to one another must be encouraged to group together in a joint communication system.

Other communication systems will have to be conceived so that motorist can rapidly notify proper authorities concerning any emergency situation which may occur along our highways.

- F. Scattered attempts are made to gather information concerning the use of seat belts. However, the information gathered could hardly be considered statistically valid. Volumes of data are presently available on the relationship of safety belts and injuries in accidents. We do not see the need of this to be included in all accident investigations but rather as a proper subject for special studies.

V REPORTING HAZARDOUS CONDITIONS

- A. & B. Programs in this area are limited almost exclusively to the State Police. Since the State Police constitute only a small portion of the total police population of this Commonwealth it must be said that a great deficiency exists in this area.

ACTION NEEDED

Systems will have to be developed to provide for the following:

Channels of communications will have to be established so that all departments can report hazardous conditions (environment, vehicle, or operator) to the appropriate agency.

Procedures will have to be developed so all departments transmit the required data in a uniform manner.

Procedures will have to be developed to assure that corrective action has been taken by the responsible agency.

Supporting legislation will be sought.

VI COOPERATION

- A. Currently there are no jurisdictional problems known which adversely affect the efficiency of the departments of this Commonwealth.
- B. Not applicable
- C. Police agencies do not supply an annual evaluation to the State Highway Safety Program Coordinator.

ACTION NEEDED

Legislation will be sought to make this requirement mandatory upon all police departments of this Commonwealth.

VII OTHER POLICE TRAFFIC SERVICES

- A. Traffic congestion and accidents are often caused by lack of safety education. Most operators know the mechanics of driving but do not know how to drive safely or defensively. Some pedestrians do not know how to travel in a manner that will lessen their exposure to danger.

Other police traffic services which are directly or indirectly related to the reduction of accidents vary greatly from one locality to another. The lack of activity in some areas has a bearing to some degree on many aspects of the Highway Safety Programs.

ACTION NEEDED

SAFETY EDUCATION

We will encourage traffic officers to visit schools and other locations frequently to impart safety messages to children.

Greater participation of traffic officers in driver improvement schools will be sought.

Greater public service time will be sought from the communication media to emphasize and convey traffic safety messages.

More frequent presentations of speeches, films, and exhibits before civil groups will be encouraged.

MOTORIST ASSISTANCE

Programs will be designed to more fully inform the public as to the proper action to take when experiencing vehicle difficulties.

Police departments will be encouraged to survey and maintain lists of facilities available which will lessen the time motorists are stranded along highways waiting for help.

Communication systems and/or procedures will be sought for furnishing rapid assistance and/or information to motorists.

WARNING AND ADVISORY PROGRAM

A program designed to increase enforcement contact will be developed.

A system will be designed to notify fleet owners of the deficiencies of safe operation and/or equipment.

A system will be designed to inform parents of the lack of safe driving on the part of their teen-age children.

ON-GOING PROJECTS

- | | |
|--------------------------|-------------|
| 1. Alcohol Testing | AL 68-1-001 |
| 2. Helicopter Patrol | PT 68-2-001 |
| 3. Communications Survey | PT 68-1-001 |

REFERENCES

References and Documentations are on file in the office of the Highway Safety Group, Harrisburg, Pennsylvania:

1. Appendix A
2. Appendix B
3. Act 48
4. House Bill 492

PRESENT STATUS

The Commonwealth of Pennsylvania does not presently have a statewide plan for accident cleanup. In general the responsibility for cleanup operations is assumed by the State Police, except in certain areas where jurisdiction is yielded to the local police. The part played by the Department of Highways, as an involved service agency in this program is important. Both the state and local police will call on state maintenance personnel if their services are required to clean the highway, remove debris and provide barricades and detour signs. (Action has been taken by the Department personnel in several areas to improve their ability to report accidents, clean the highway and provide barricades and detours.) A program for providing pre-established detours on expressways in urban areas where accidents can create long traffic delays has been established. The police also contact commercial tow trucks, fire companies and other appropriate agencies if their services are required.

The Department of Highways policy for the treatment of disabled or abandoned vehicles is covered in circular letters M-2235 and M-2256. Provisions are made that department employees shall observe vehicles abandoned along state highways and notify the proper authorities. When the necessary thirty day period needed to consider the vehicle abandoned has elapsed, the abandoned or disabled vehicle may be removed from the roadway.

Equipment sometimes has difficulty reaching accident sites when inadequately trained personnel dispatch equipment with incomplete information.

Many service crews do not have two-way communication and cannot be contacted quickly while on routine assignments and must be contacted by messengers when emergencies arise.

While there many excellent ambulance and rescue crews, there are also many inadequately trained in the extraction and handling of injured persons.

Many fire and rescue personnel have little or no experience in the handling of hazardous substances.

Continuous median barriers on expressways sometimes make it difficult for emergency vehicles to reach accident sites.

CURRENT PROGRAM DEFICIENCIES

- a. There is no detailed study in progress for coordination of resources relating to accident cleanup; problem areas have not been identified; priorities of needs have not been established; criteria to implement standard have not been developed. (Reference: Appendix A, Items A.1, 2, 3, 4).

- b. Plans to evaluate the state program have not been developed. (Reference: Appendix A, Item A.5)
- c. Some legislation may be needed to establish lines of authority and responsibility for reporting dangers , hazards and debris or for restoration of safer conditions. It may also be needed for establishing the responsibility for coordinating response for corrective action. (Reference: Appendix A, Item B.1, 2)
- d. While there are local emergency plans, there is no statewide program to assure quick detection of incidents and procedures to alert authorities; nor a statewide communication system equipped and manned by trained personnel. (Reference: Appendix A, Items C.1, 2,3)
- e. Statewide procedures have not been developed for removal of dangerous substances and restoration of incident sites. (Reference: Appendix A, Item C.4)
- f. There are no formal procedures to inform news media of incidents especially public warnings of hazards, although this function is carried out locally by agencies involved. (Reference: Appendix A, Item C.5)

ACTION NEEDED

- a. b. Although there have been numerous local plans and procedures developed by local agencies, a statewide study will be made to determine the problem areas, identify the needs, and develop a criteria to serve as a guide and measure of adequacy of established operators.
- c. The study cited above will also consider legislative needs to fulfill the requirements of this standard.
- d. Some counties and local police or fire agencies have excellent communications and procedures to detect and service accidents and other emergencies. These procedures will be reviewed and incorporated into a statewide plan.
- e. The Commonwealth, under the Hazardous Substance Board, has begun assisting state and local police in removal of dangerous substances and restoration of incident sites. This procedure will be expanded as experience is gained, to provide all affected state and local agencies with proper information and assistance to enable safe and effective handling of dangerous substances.
- f. Although there have been no formal procedures established and in use statewide to specifically inform news media of incidents affecting public safety, in practice local agencies appear to notify news media promptly and effectively. This will be evaluated on a statewide basis in the study mentioned in (a.) and (b.).

POLITICAL SUBDIVISION PROGRAM

The Debris Removal Standard overlaps with the requirements of several other standards. Therefore, most of the necessary coordination and cooperation with political subdivisions to meet the requirements of the Program Standard will be provided under the Emergency Medical Service and the Highway Design, Construction and Maintenance Standards.

REFERENCES

Documentation and references are on file in the office of the Highway Safety Group, Harrisburg, Pennsylvania.

1. Appendix A
2. Appendix B
3. Circular Letters M-2235 and M-2256

COMMONWEALTH OF PENNSYLVANIA

HIGHWAY SAFETY PROGRAM

Estimated Costs
Fiscal Years 1968/69 and 1969/70

Std. No.	Program and Project	Estimated Total Cost 1968/69 and 1969/70	Standard Total
300	<u>Planning and Administration</u>	.727,363	727,363
301	<u>Periodic Motor Vehicle Inspection</u>		
	Train Inspection Mechanics	400,000	
	Summary of Inspection Records	350,000	
	Four-cycle Inspection Periods (not in State Police costs)	75,000	
	Inspection and Licensing of Reconstructed Vehicles	<u>25,000</u>	850,000
302	<u>Motor Vehicle Registration</u>		
	Conversion - Manual to E.D.P.	<u>315,000</u>	315,000
303	<u>Motorcycle Safety</u> - Included in 301-302		
304	<u>Driver Education</u>		
	Subsidy to Local School Districts - Expanded Program - State	1,000,000	
	Driver Ed. Expanded Program - Local	2,000,000	
	Chambersburg School District	58,400	
	Curriculum Development	2,000,000	
	Adult Driver Education	50,000	
	Training Driver Ed. Teachers	<u>65,000</u>	5,173,400
305	<u>Driver Licensing</u>		
	Four Year Re-examination Program	200,000	
	Medical Advisory Board	8,400	
	Driver Test Facility	900,000	
	Examination of Medical Cases	25,000	
	Additional Field Representatives	40,562	
	Decentralization - Feasibility Study	30,000	
	No Fix Ticket System	<u>100,000</u>	1,304,052
306	<u>Codes and Laws</u>		
	Study of Local Ordinances	<u>10,000</u>	10,000
307	<u>Traffic Courts</u>		
308	<u>Alcohol in Relation to Highway Safety</u>		
	Test Blood Samples of Deceased	17,000	
	Testing for Alcohol (State Police)	<u>224,430</u>	241,430

Std. No.	Program and Project	Estimated Total Cost 1968/69 and 1969/70	Standard Total
309	<u>Identification and Surveillance of Accident Locations</u>		
	Mileposting	619,866	
	Accident Review Teams	<u>1,099,044</u>	1,718,910
310	<u>Traffic Records</u>		
	All Costs - All Departments	<u>3,823,000</u>	3,823,000
311	<u>Emergency Medical Services</u>		
	Hospital Emergency Room Survey	30,000	
	Standards and Licensing Requirements		
	Ambulance Attendants and State and Local Councils	33,990	
	Training of Ambulance Operations	36,574	
	Communications Facility - Statewide		
	Helicopter Ambulance Service (1968/69)	<u>185,900</u>	286,464
312	<u>Highway Design, Construction and Maintenance</u>		
	Design Criteria - Local Roads Study	100,000	
	Roadway Lighting Study	102,588	
	Standards for Skid Resistance	130,000	
	Freeway Access - Emergency Vehicles	10,000	
	Evaluate Local Roads Needs Study	30,000	
	Municipal Services Control	312,000	
	Safety Maintenance Program	<u>100,000</u>	784,588
313	<u>Traffic Control Devices</u>		
	Sign Inventory	<u>25,000</u>	25,000
314	<u>Pedestrian Safety</u>		
	Needs Study	<u>100,000</u>	100,000
315	<u>Police Traffic Services</u>		
	Aircraft Patrol	521,439	
	Communications	2,121,933	
	Police Training - State	1,003,000	
	Police Training - Local	1,500,000	
	Additional Manpower:		
	State Police - Expanded Program	1,896,890	
	State Police - Garage Inspection	615,000	
	State Police - Comm. Vehicle Inspection - Spot	72,000	
	State Police - School Bus Inspection - Spot	50,000	
	Local Police	<u>600,000</u>	8,380,262
316	<u>Debris, Hazard Control and Cleanup</u>		
	Highway Communications	<u>1,000,000</u>	<u>1,000,000</u>
	Total Program - 2 Years		24,739,469

LIBRARY

PA. DEPT. OF HIGHWAYS